# All Sport<sup>®</sup> 5500 Series Control Console

**Operation Manual** 

ED-16809

Rev 6 - 10 September 2012

# DAKTRONICS



ED-16809 Product 1389 Rev 6 – 10 September 2012

# DAKTRONICS, INC.

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# **Section 1: Introduction**

This manual is designed to explain the operation of the All Sport<sup>®</sup> 5500 Series console. For additional information regarding the safety, installation, operation, or service of this system, refer to the telephone numbers listed in **Section 1.2**.

#### Important Safeguards

- 1. Read and understand all instructions, both general and for specific sports.
- **2.** Do not drop the control console or allow it to get wet.
- **3.** Do not disassemble control equipment or electronic controls of the display; failure to follow this safeguard will make the warranty null and void.
- **4.** Always turn off and/or unplug the control equipment when it is not in use. Never yank the power cord to pull the plug from the outlet. Grasp the plug and pull to disconnect.
- **5.** Do not let any power cord touch hot surfaces or hang over the edge of a table that would damage or cut the cord.
- **6.** If an extension cord is necessary, a three-pronged, polarized cord should be used. Arrange the cord with care so that it will not be tripped over or pulled out.

#### 1.1 Resources

Figure 1 illustrates a Daktronics drawing label. The drawing number is located in the lower-right corner of a drawing. This manual refers to drawings by listing the last set of digits and the letter preceding them. In the example, the drawing would be referred to as **Drawing C-325405**.

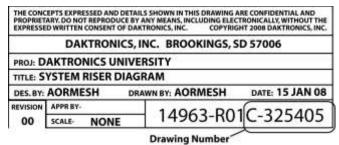


Figure 1: Daktronics Drawing Label

#### Reference Drawing:

System Riser Diagram ...... Drawing C-325405

Daktronics identifies manuals by an ED or DD number located on the cover page of each manual. For example, this manual would be referred to as **ED-16809**.

Introduction 1

# 1.2 Daktronics Exchange and Repair & Return Programs

#### **Exchange Program**

The Daktronics Exchange Program is a service for quickly replacing key components in need of repair. If a component fails, Daktronics sends a replacement part to the customer who, in turn, returns the failed component to Daktronics. This decreases equipment downtime. Customers who follow the program guidelines explained below will receive this service.

#### Before Contacting Daktronics

Identify these important numbers:

Assembly Number:	
Job/Contract Number:	
Date Installed:	
Daktronics Customer ID Number:	

To participate in the Exchange Program, follow these steps.

#### 1. Call Daktronics Customer Service.

Market Description	Customer Service Number
Schools (including community/junior colleges), religious organizations, municipal clubs and community centers	877-605-1115
Universities and professional sporting events, live events for auditoriums and arenas	866-343-6018

#### 2. When the new exchange part is received, mail the old part to Daktronics.

If the replacement part fixes the problem, send in the problem part being replaced.

- **a.** Package the old part in the same shipping materials in which the replacement part arrived.
- **b.** Fill out and attach the enclosed UPS shipping document.
- **c.** Ship the part to Daktronics.

# 3. The defective or unused parts must be returned to Daktronics within 5 weeks of initial order shipment.

If any part is not returned within five (5) weeks, a non-refundable invoice will be presented to the customer for the costs of replenishing the exchange parts inventory with a new part.

Daktronics reserves the right to refuse parts that have been damaged due to acts of nature or causes other than normal wear and tear.

2 Introduction

#### Repair & Return Program

For items not subject to exchange, Daktronics offers a Repair & Return Program. To send a part for repair, follow these steps:

#### 1. Call or fax Daktronics Customer Service:

Refer to the appropriate market number in the chart listed on the previous page. **Fax:** 605-697-4444

#### 2. Receive a case number before shipping.

This expedites repair of the part.

#### 3. Package and pad the item carefully to prevent damage during shipment.

Electronic components, such as printed circuit boards, should be placed in an antistatic bag before boxing. Daktronics does not recommend using packing 'peanuts' when shipping.

#### 4. Enclose:

- name
- address
- phone number
- the case number
- a clear description of symptoms

#### Shipping Address

Daktronics Customer Service [Case #] 201 Daktronics Drive, Dock E Brookings, SD 57006

#### **Daktronics Warranty and Limitation of Liability**

The Daktronics Warranty and Limitation of Liability is located in **Appendix F**. The Warranty is independent of Extended Service agreements and is the authority in matters of service, repair, and display operation.

Introduction 3

# **Section 2: Basic Operation**

# 2.1 Console Operation

The console face consists of a 2-line by 16-character liquid crystal display (LCD), number/menu keypads, horn/clock controls with LED status indicators, and an area for a sport-specific insert. Refer to **Figure 2** to locate these components on the control console face.

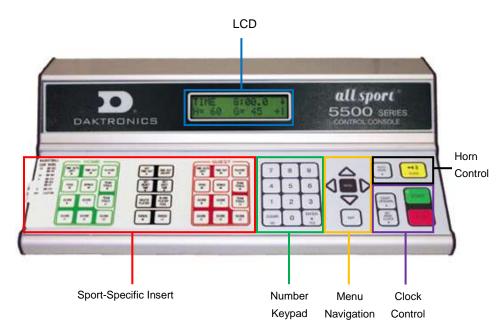


Figure 2: All Sport® 5500 Layout

In most cases, the top line of the LCD shows the main clock time, direction the clock is counting, and when the main horn is sounding, while the bottom line typically shows the HOME and GUEST team scores.

The standard fixed keys and functions on the right side of the console are explained in **Section 2.5**. All of the keys that pertain to a specific sport code insert are explained in detail in their respective sport section.

Throughout the manual the names or letters of *keys* on the keypad are enclosed in arrows (such as **<ENTER>**).

# 2.2 Sport Inserts

Sport inserts allow a single console to control multiple sports. Select the proper insert from the chart below and slide it into the insert opening on the left side of the console until it stops. To remove a sport insert, pull on the tab that extends from the left side of the console.

If an insert is lost or damaged, a printed copy of the insert drawing, located in **Appendix B**, may be used until a replacement can be ordered. Print this page (if not available) and write the code number in the following table for all applicable sports.

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

Sport	Insert Number	Number Code
Basketball	LL-2433	
Segment Timer	LL-2475	Not applicable
Volleyball	LL-2434	
Wrestling	LL-2435	

#### **Sport Insert Operation Concepts**

A sport insert identifies the keys required for normal operation of a specific sport. In most cases, pressing a key immediately changes the scoreboard. Keys that require entry of additional information are marked by a dot. This additional information usually is a number followed by the **<ENTER>** key.

Keys with arrows activate an indicator (possession, bonus, etc.) on the scoreboard. The direction of the arrow selects the appropriate team (home or guest).

Some keys are labeled **+1**, **+2**, or **+3**. By pressing one of these keys once, the corresponding field on the scoreboard (such as score or period) "increments", or increases, by the amount printed on the key. A key with a **-1** "decrements", or decreases, by one.

On most inserts, certain keys have been grouped together under the heading **Home** or **Guest**. These keys are **team** keys and work the same for both teams. They affect the statistics only for that one team. Keys not under one of these headings are **game** keys. They are general keys for the progress of the game (such as period or quarter). Other keys have been blocked together to emphasize that they work together.

# 2.3 Start Up

Use the rocker switch on the back of the console to turn it on, then follow the LCD screens:

Display	Action
AS-5500 VX.X.X ED-16411	The console performs a self-test when it is powered on. During the self-test, a message displays the version of the standard software loaded in the console.  V = version number and revision number ED = standard software number
PREV CODE NNNN RESUME GAME?  NNNN = last code selected	When the self-test completes, a prompt displays the code number for the last game played. This is useful when power to the console is lost during a game.  Press <yes> to resume the last game stored in memory. The console is now ready for game operation.  Press <no> to start a new game or change to a different sport. The console will prompt for a new code number.</no></yes>
SELECT CODE CODE NNNN  NNNN = last code selected	The SELECT CODE prompt allows users to accept the last code selected (shown on the second line) or enter a new code.  To accept the code shown press <b><enter></enter></b> .  To select a new sport code:  1. Get the code number from the sport insert or the section of the manual for that sport.  2. Use the number keys to enter the new four-digit code.  3. Press <b><enter></enter></b> .
RADIO SETTINGS BCAST X CHAN YY  X = last broadcast number used YY = last channel number used	If a new code is selected, and the radio option is installed, the console prompts for a channel. When Resume Game is used, the last channel selected is used.  Press <b><enter></enter></b> to accept the channel number or press <b><clear></clear></b> to enter a new channel number.  Refer to <b>Section 2.4</b> for more information.

# 2.4 Setting Radio Channels

#### Reference Drawings:

The radio receiver units used in Daktronics scoreboards have a channel (CHAN) switch that can be set from 1–8. The receivers also have a broadcast group (BCAST) setting. The broadcast group defines a group of radio receivers that "listen" to the channel selected on the channel switch as well as "listen" for data sent out on their broadcast channel.

**Note:** The number of available broadcast groups varies depending on the generation of radio receiver: Gen V radio receivers have 1–4, while Gen VI radio receivers have 1–8.

Each radio receiver will accept data sent from the broadcast channel of its respective broadcast group, as well as data sent from the "Master Broadcast" channel. This is selected when the console is set to BCAST 0 and CHAN 00.

In this type of system, the receiver unit at the scoreboard must have the channel switch set to a specific channel. The operator must know which channel is selected in the scoreboard. The operator must then enter the specific channel when prompted during console startup.

To determine the settings of a scoreboard, first power it down and shut off any radio-equipped consoles in the area. Next, power the scoreboard back up and watch for the radio settings. The settings will appear as "bX CY" where X is the current broadcast group and Y is the current channel.

The settings are typically displayed in the clock digits (**Figure 3**) or Home and Guest score digits, depending on the scoreboard model.



Figure 3: Radio Settings in Clock Digits

The console automatically detects when a radio transmitter is installed and will prompt the user for transmitter settings after a valid sport code is entered.

**Note:** If interference from a nearby Daktronics system is suspected, press **<CLEAR>** at the "RADIO SETTINGS" prompt to change the channel number.

There are three different radio scenarios that can be accommodated: a single controller system, a multiple controller system with a single broadcast group, and a multiple controller system with multiple broadcast groups. These scenarios are described on the following pages.

# **Single Controller System**

In a single controller system (*Figure 4*), all radio receivers and all scoreboards receive signal from the same console at all times. The default channel and broadcast group settings on the receiver are not typically modified. An example of this type of system is a gymnasium with a scoreboard on one or both end walls displaying the same information.

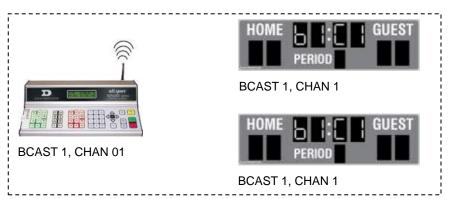


Figure 4: Single Control Console

Typically all single controller systems will use the default setting BCAST = 1, CHAN = 1. All radio receivers in the system must be set to the same values.

Display	Action
RADIO SETTINGS BCAST X CHAN YY  ENTER TO ACCEPT CLEAR TO MODIFY  The LCD will toggle between these 2 screens.	The LCD shows the current radio settings along with a prompt to accept or modify these values.  If the radio settings are correct press <b><enter></enter></b> .  If these values are incorrect press <b><clear></clear></b> , and the LCD at bottom left is shown, allowing edit of the channel or broadcast group setting.
BCAST GROUP 1* RADIO CHAN 01	Broadcast Group Setting  1 Use this setting for all single controller systems. Use the number keys to edit this value and press <enter> to accept. The asterisk will move to the channel setting.  Channel Setting  1-8 Edit the channel number to the desired value and press</enter>
	<b><enter></enter></b> to accept. The CHAN switch on the receiver must match this value.

#### Multiple Controller System with Single Broadcast Group

In a multiple controller system with a single broadcast group (*Figure 5*), there may be one console for each scoreboard and/or one master controller that can run every scoreboard at one time or take control of a specific scoreboard. An example of this type of system is a softball complex with individual scoreboards on several different fields.

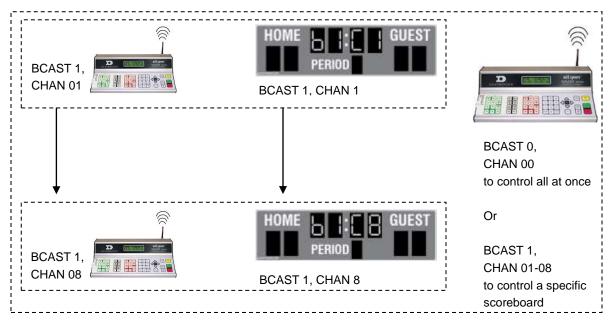


Figure 5: Single Broadcast Group

Multiple controller systems typically use Broadcast 1 and Channel 1 for the first controller and Channels 2-8 for all remaining controllers. All radio receivers in the system must be set to Broadcast 1 (BCAST 1).

Display	Action
RADIO SETTINGS BCAST X CHAN YY	The LCD shows the current radio settings along with a prompt to accept or modify these values.
ENTER TO ACCEPT CLEAR TO MODIFY	If the radio settings are correct press <b><enter></enter></b> .  If these values are incorrect press <b><clear></clear></b> , and the LCD at bottom left is shown, allowing edit of the channel or broadcast
The LCD will toggle between these 2 screens.	group setting.
	Broadcast Group Setting
BCAST GROUP 1*	Use this setting for all multiple controllers with single broadcast group setups. Use the number keys to edit this value and press <b><enter></enter></b> to accept. The asterisk will move to the channel setting.
RADIO CHAN 01	
	Channel Setting
	1-8 Edit the channel number to the desired value and press
	<enter> to accept. The CHAN switch on the receiver</enter>
	must match this value.

#### **Multiple Controller with Multiple Broadcast Groups**

In a multiple controller system with multiple broadcast groups (*Figure 6*), there are many consoles that control multiple scoreboards and/or scoreboard groups. The radio receiver inside the scoreboard is set to broadcast group 1–4 (Gen V) or 1–8 (Gen VI). By changing the console settings to the specific broadcast group address, a single console can control all scoreboards or specific groups of scoreboards. One example of this scenario is split court operation in basketball installations, where scoreboards are used to score multiple games at once, but can be grouped together to show one game if necessary.

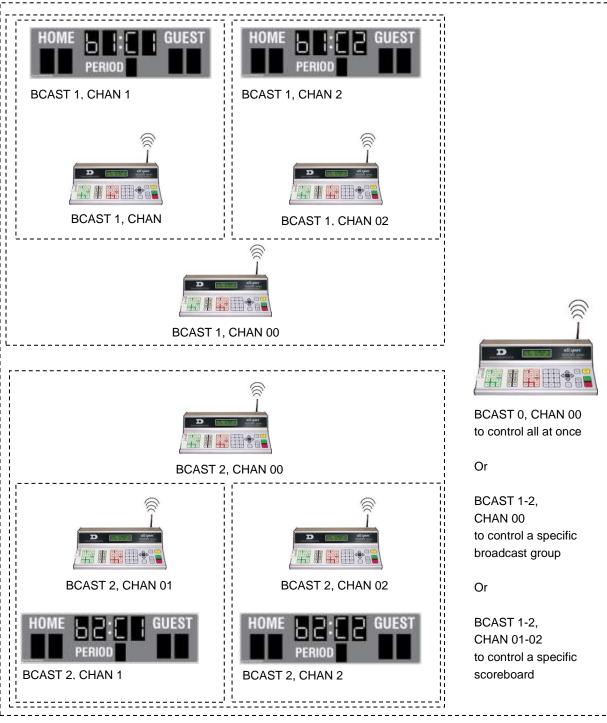


Figure 6: Multiple Broadcast Group

Typically, all multiple controller systems will use BCAST 1, CHAN 1 for the first controller in Broadcast Group 1 and BCAST 2, CHAN 1 for the first controller in Broadcast Group 2. All other consoles in a group are added sequentially.

#### **Display** Action RADIO SETTINGS The LCD shows the current radio settings along with a prompt to accept or modify these values. BCAST X CHAN YY If the radio settings are correct press **<ENTER>**. ENTER TO ACCEPT If these values are incorrect press <CLEAR>, and the LCD at CLEAR TO MODIFY bottom left is shown, allowing edit of the channel or broadcast The LCD will toggle between group setting. these 2 screens. Use the number keys to enter the desired broadcast group and press <ENTER> to accept. The asterisk will move to the channel setting. BCAST GROUP 1\* Edit the channel number to the desired value and press RADIO CHAN 01 <ENTER> to accept. Broadcast Channel **Control Scoreboards Setting** Group 0 0 All Scoreboards 0 All in BCAST Group 1 1 Set to corresponding BCAST 1 1-8 Channel 0 All in BCAST Group 8 8\* Set to corresponding BCAST 8 1-8 Channel \* Gen V radio receivers have only 4 groups; also, on broadcast groups 2 and 4, only channels 1-4 may be used.

# 2.5 Standard Keys

#### Start

**<START>** is used to start the main clock. The green LED on the **<START>** key is on while the main clock is running.

#### Stop

**<STOP>** is used to stop the main clock. The green LED on the **<START>** key is off while the main clock is stopped.

#### Enter/Yes

The **<ENTER/YES\*>** key has two functions:

- Completes an action. As a reminder to press this key an asterisk appears on the LCD.
- Serves as **YES>** for input prompts **(Y)**.

#### Clear/No

The **<CLEAR/NO>** key has two functions:

- Clears the LCD of numerical information.
- Serves as **<NO>** for input prompts **(N)**.

#### **Edit**

The **<EDIT>** key allows the user to select which field on the scoreboard to be edited (such as team score). After pressing the **<EDIT>** key, press one of the increment or decrement keys for the desired field on the scoreboard. Then simply enter the new value to display and press **<ENTER>** to accept.

#### Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. The left and right arrow keys enter and exit submenu lists for a specific menu item. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, or other allowed keys, exists the Menu function.

# **Set Main Clock**

Display	Action
MAIN CLOCK -SET CURR MM:SS.T *  MM:SS.T = minutes, seconds, tenths of a second	After the main clock has been stopped, press <b>SET MAIN CLOCK&gt;</b> to display the current time of the main clock.  To change the time, enter the desired value on the number pad and press <b>SENTER&gt;</b> .  Press <b>CLEAR&gt;</b> twice to clear changes and return to the game.
MAIN CLOCK -EDIT	Press <b><set clock="" main=""></set></b> a second time or the down arrow
PERIOD MM:SS *  MM:SS = minutes, seconds	key to display the configured time for the main clock period length.
	To accept the displayed period length press <b><yes></yes></b> .
	To decline the selection of the period length press <b><no></no></b> .
	To change the period length and set the main clock enter the new time in minutes and seconds on the number pad and press <b><enter></enter></b> .
	<b>Note:</b> Pressing <b><enter></enter></b> to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.
	Press <b><clear></clear></b> twice to clear changes and return to the game.
MAIN CLOCK -EDIT BREAK MM:SS *	Press <b><set clock="" main=""></set></b> a third time or the down arrow key to display the configured time for break length.
MM:SS = minutes, seconds	To accept the break length press <b><yes></yes></b> .
	To decline the selection of the break length press <b><no></no></b> .
	To change the break length and set the main clock enter the new time in minutes and seconds on the number pad and press <b><enter></enter></b> .
	Press <b><clear></clear></b> twice to clear changes and return to the game.

Display	Action
MAIN CLOCK -EDIT OT MM:SS *	Press <b><set clock="" main=""></set></b> a fourth time or the down arrow key to display the configured time for overtime length.
MM:SS = minutes, seconds	To accept the overtime length press <b><yes></yes></b> .
	To decline the selection of the overtime length press <b><no></no></b> .
	To change the overtime length and set the main clock enter the new time in minutes and seconds on the number pad and press <enter>.</enter>
	Press <b><clear></clear></b> twice to clear changes and return to the game.
MAIN CLOCK -EDIT PRE MM:SS *	Press <b><set clock="" main=""></set></b> a fifth time or the down arrow key to display the configured time for pre-game length.
MM:SS = minutes, seconds	To accept the pre-game length press <b><yes></yes></b> .
	To decline the selection of the pre-game length press <b><no></no></b> .
	To change the pre-game length and set the main clock enter the new time in minutes and seconds on the number pad and press <b><enter></enter></b> .
	Press <b><clear></clear></b> twice to clear changes and return to the game.
MAIN CLOCK -EDIT POST MM:SS *	Press <b><set clock="" main=""></set></b> a sixth time or the down arrow key to display the configured time for post-game length.
MM:SS = minutes, seconds	To accept the post-game length press <b><yes></yes></b> .
	To decline the selection of the post-game length press <b><no></no></b> .
	To change the post-game length and set the main clock, enter the new time in minutes and seconds on the number pad and press <b><enter></enter></b> .
	Press <b><clear></clear></b> twice to clear changes and return to the game.

# **Count Up/Down**

Display	Action
MAIN CLOCK- DOWN 1-UP 2-DOWN	After the main clock has been stopped, the direction of the clock can be set.  Press <1> or <2> to select UP or DOWN (default).  Note: The current direction of the main clock is shown on
	the top line of the LCD.
	The <b><count down="" up=""></count></b> function is disabled while the clock is already running.

#### **Auto Horn**

Display	Action
AUTO HORN- ON 1-ON, 2-OFF	Press <1> or <2> to select ON (default) or OFF. The amber LED on the <horn> key is on when the Auto Horn feature is enabled. The LED is off when the Auto Horn feature is disabled and the horn is in Manual mode.</horn>

#### **Manual Horn**

Press **<HORN>** to sound the main horn. The horn sounds as long as the key is pressed.

# 2.6 Remote Start/Stop Controls

The All Sport® 5500 console lets additional operators control timing functions remotely using the Main Clock Start/Stop switch and the Shot Clock Start/Stop switch.

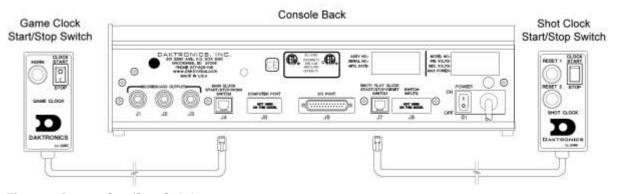


Figure 7: Remote Start/Stop Switches

#### **Main Clock Control**

The Main Clock Start/Stop switch plugs into J4 on the back of the console (**Figure 7**). This unit has a rocker switch for clock start/stop and a button for horn. The horn button sounds the horn as long as the button is pressed.

#### **Shot Clock Control**

The Shot Clock Start/Stop switch plugs into J7 on the back of the console (**Figure 7**). This unit has a rocker switch for Start/Stop and reset button(s). When a reset button is pressed, the shot clock timer is changed to the reset value and stops the timer from decrementing. The shot clock timer restarts when the reset button is released. In independent mode, the switch starts and stops the shot clock timer when pushed, but does not stop when the main clock is stopped. When in synchronized mode, the shot clock timer will stop and start with the main clock switches only if it is running in the beginning.

Refer to **Section 4** for sport-specific information about shot clock configurations.

# 2.7 General Multi-Purpose Timer Information

There is no insert for the Multi-Purpose Timer codes. Code 99 is used to operate the multi-purpose timer.

The Multi-Purpose Timer is a general timer used for 2, 4, and 6 digit time displays. The timer will count up or down though hours, minutes, and seconds. The information will shift on the 2 and 4 digit displays to show the most significant time values as the time changes. The Multi-Purpose Timer code is also used as a Time-of-Day code by accessing the Time of Day Menu through the Menu key. The Segment Timer may also be accessed using the Menu key.

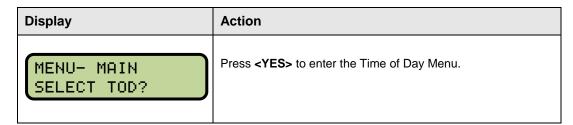
#### **Standard Keys**

The keys that are used by the multi-purpose timer are **START>**, **STOP>**, **SET MAIN CLOCK>**, **COUNT UP/DOWN>**, **AUTO HORN>**, **MANUAL HORN>** and **MENU>**. The key functions are explained in more detail in **Section 2.5**.

#### Accessing the Multi-Purpose Timer

Turn on the console, enter multi-purpose timer code "99" and press **<ENTER>**.

Press the **<MENU>** key and press the down or up arrows until the following message is displayed:



#### Segment Timer

Refer to **Section 3** for details on accessing and operating the segment timer function.

# 2.8 Team Name Entry

Certain scoreboard models are equipped with Team Name Message Centers (TNMCs), small matrix displays that allow users to show team names, abbreviations, or other short messages.

The team name entry function is typically accessed by pressing the **<MENU>** key and navigating to the HOME or GUEST TEAM NAME option (refer to an individual sport section for more information).

The TEAM NAME insert (LL-2441) is used to enter the TNMC settings. For newer consoles, the Team Name insert is printed directly on the keypad, while for older consoles it will be necessary to swap the sport insert with a separate insert. The TEAM NAME insert has the following sections for controlling the appearance of the display:

#### **WIDTH**

Select the width (in pixels) of the TNMC from 16, 32, 48 or 64 columns. The default width is 48 columns long.

#### **HEIGHT**

Select the height (in pixels) of the TNMC from 7 or 8 rows. The default height is 8 rows high.

#### **FONT**

Select from Single Stroke or a Double Stroke (bold) font. The default font is single stroke. Each TNMC on a scoreboard (Home & Guest) may use different font settings to fit varying team name lengths.

The tables below demonstrate the width (in pixels) of every character for each font setting:

TNMC Font	Α	В	С	D	Е	F	G	Н	I	J	K	L	М	N	0	Р	Q	R	S	T	U	٧	W	Х	Υ	Ζ
Single Stroke -	4	4	4	4	4	4	4	4	3	4	4	4	5	4	4	4	5	4	4	5	4	5	5	5	5	4
Standard	4	4	4	4	4	4	4	4	5	4	4	4	5	4	4	4	5	4	4	5	4	5	5	3	5	4
Single Stroke -	3	3	3	3	3	3	4	3	1	3	4	3	5	4	3	3	5	3	3	3	3	5	5	5	3	4
Alternate Narrow*	3	3	3	<u>م</u>	<u>م</u>	<u>م</u>	4	3	1	<u>م</u>	4	3	5	4	3	3	5	5	<u>م</u>	9	3	5	5	3	<u>ه</u>	4
Double Stroke -			(	6		6		6	4			6	7		6	6	7	(	(			7	7	7	(	
Standard	6	6	6	О	6	0	6	О	4	6	6	0	/	6	О	О	/	6	6	6	6	/	/	′	6	6
Double Stroke -	5	5	5	5	4	4	6	5	2	5	6	4	7	6	5	5	7	5	5	4	5	7	7	7	6	6
Alternate Narrow*	3	3	3	3	4	4	О	3		3	О	4	/	6	3	3	/	3	3	4	3	/	/	/	6	6

\*To access Alternate Narrow fonts, press the **<SHIFT>** key before pressing a letter key. A lowercase letter is shown on the LCD to represent the Alternate Narrow characters.

TNMC Font	1	2	3	4	5	6	7	8	9	0	&	•	,	-	
Single Stroke - Standard	3	4	4	5	4	4	4	4	4	4	5	2	2	3	1
Double Stroke - Standard	4	6	6	7	6	6	6	6	6	6	5	3	3	3	2

# **Section 3: Segment Timer**

Sport Insert: LL-2475 (Code 100 is for the dedicated Segment Timer)

The Sport Insert drawing is located in **Appendix B**.

#### **Reference Drawings:**

Refer to the information in **Section 2** to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

### 3.1 Segment Timer Overview

The segment timer is a multi-function timing system and has multiple purposes. Operation of the segment timer is determined by ninety-nine segments of pre-programmed length. The segment timer will count down starting at the segment number that is set as **First Segment**. When the first segment is completed, the timer will count the preset **Interval Time** and move on to the next segment. The timer will continue counting segments until the segment number that is set as **Last Segment** is complete. It then will reset to the segment saved as the **First Segment** and will either begin counting down or wait for the **START>** key to be pressed depending on the **AUTO STOP>** setting. Refer to **Auto Stop** in this section to set the segment-stopping feature.

The first and last segment values can be used to set up specific practice sessions. For example, the practice session for one sport could be programmed for five minute segments on segments 1-10 while another might use 10 minute segments on 11-20. Set the first segment and last segment values to the desired segment numbers for the session and the console will count down each of the segments in order. It may also be set to either stop on the last segment or go back to the first segment segments again based on the **<AUTO STOP>** setting.

The segments values will be saved when the console is turned off and will be the same values regardless of the sport that was used to access the segment timer.

# 3.2 Accessing Segment Timer

Turn on the console. Enter the sport code used for the scoreboard in use and press **<ENTER>**. A list of sport codes can be found in **Appendix C**.

The segment timer program is accessed through the main menu of each individual sport. The **DISPLAY MENU** allows the user to start the segment timer. Press the **<MENU>** key and press the down or up arrows until the following message is displayed:

Display	Action
MENU- MAIN ENTER DISPLAY TIMER?	After the main clock has been stopped, press the <b><menu></menu></b> key and press the down or up arrows until the LCD at left is displayed. Press <b><yes></yes></b> to enter the display menu
MENU-DISPLAY RUN SEGMENT TIMER?	Press <b><yes></yes></b> to exit the sport code and run the segment timer program.
EXIT GAME ARE YOU SURE?	The console will prompt the user to press <b><yes></yes></b> a second time to avoid accidental exit from the sport program.  Refer to <b>Section 3.4</b> for general segment timer operation instructions.

# 3.3 Accessing 2-Digit or 6-Digit Display Segment Timer

This code is only used for the two-digit or six-digit displays designed exclusively for timing displays. Enter code 100 after turning on the console to access the exclusive segment timer program. For scoreboards, enter the correct scoreboard code and use <MENU> to access the segment timer function.

# 3.4 Segment Timer Keys

# **Segment Number & Time**

The **SEG. NO.** • **TIME** •> key is used to edit the time of each segment. Select the segment to be edited, and enter the time desired as described below.

Display	Action
SEGMENT: XX * TIME EDIT  XX = current setting	Press <b><seg. no.="" time="" •=""></seg.></b> to set individual segment times.  Enter the segment to be edited with the keypad and press <b><enter></enter></b> .
SEGMENT: XX TIME EDIT MM:SS*	Enter the time for the segment with the keypad. Press <enter> to accept the time and move to the next segment time.</enter>
XX = current setting MM:SS = minutes, seconds	Press <b><enter></enter></b> again to exit the function.
	Press the up or down arrow keys to move to the previous or next segment.

# **First Segment**

This key sets the first segment in a range of segments to run when **<START>** is pressed.

Display	Action
FIRST SEGMENT	Press <first segment="" •=""> and enter the segment to be set as the first segment. Press <enter> to accept the time and exit the function.</enter></first>
NN = current setting	
	The console will be reset to the segment selected here when
	the <b><reset first="" seg="" to=""></reset></b> key is pressed.

# **Last Segment**

This key sets the last segment in a range of segments to run when **<START>** is pressed.

Display	Action
LAST SEGMENT NN* NN = current setting	Press <b><last segment="" •=""></last></b> and enter the segment to be set as the last segment. Press <b><enter></enter></b> to accept the time and exit the function.
	After the segment set as the last segment is completed, the console will automatically reset to the segment saved as the first segment.

#### **Interval Time**

The interval time is the time between each segment. The interval time can be displayed on the Guest digits using the **<DISPLAY INTERVAL>** key.

Display	Action
INTERVAL TIME: MM:SS	Press <interval *="" time=""> to display the current value of interval time on the bottom line of the LCD. Edit the value of the interval time and press <enter>.</enter></interval>
MM:SS = minutes, seconds	

#### **Display Interval**

This setting determines whether the interval count will be displayed on the scoreboard.

Display	Action
DISPLAY INTERVAL YES OR *NO?	Press <b><display interval=""></display></b> .  Press <b><yes></yes></b> to display the interval time on the scoreboard.  Press <b><no></no></b> to disable interval time display. The interval time will be displayed only on the console if <b>NO</b> is selected.

Display	Action
	<b>Note 1:</b> Regardless of this setting, the value saved in interval time will be counted down between segments. Set the interval time to zero if no interval between segments is desired.
	<b>Note 2:</b> When the interval time is being displayed, the segment number on the scoreboard flashes to indicate that the time displayed is interval time.

# **Copy Range**

This key sets a range of segments to a specific value.

Display	Action
COPY: MM: SS * SEG XX TO YY  MM:SS = minutes, seconds XX = starting segment value YY = ending segment value	Press <b><copy b="" range<=""> •&gt; and enter the time desired. Press <b><enter></enter></b> to move to the next field. Enter the first and last segments that will have this time. When the last segment in the copy range is set, the menu will be exited.  Once completed, all segments from XX to YY (inclusive) will be set to the specified value.</copy></b>

# **Auto Stop**

This key is the auto stop function of the console.

**Note:** To set the console to stop after the last segment in the series is completed, the auto stop at each segment setting must be set to **NO**.

Display	Action
AUTO STOP AT EACH SEG Y/N*	Press <b><auto stop=""></auto></b> to enter this menu. Press <b><yes></yes></b> to set the console to stop after each segment is completed. Press <b><start></start></b> to proceed with the next segment.
	Press <b><no></no></b> to set the console to automatically begin the next segment when each segment is completed. The console will prompt for the auto stop at last segment setting.
AUTO STOP AT LAST SEG *Y/N	Press <b><yes></yes></b> to set the console to stop when the last segment has been completed. Press <b><no></no></b> to set the console to start over at the first segment when the last segment is completed

#### **Reset to First**

Press **<RESET TO FIRST SEG>** to reset the segment number to the segment set as the first segment.

**Note:** The reset to first function is disabled while the clock is running.

#### **Reset Current Segment**

Press **<RESET CURRENT SEGMENT>** to reset the segment time to the value specified by the current segment. The segment number will remain at the current value.

#### **Current Segment**

Press **<CURRENT SEGMENT +1>** to move to the next segment.

#### 3.5 **Edit**

### **Current Segment**

Display	Action	
CURRENT SEGMENT: EDIT NN*	Press <b><edit></edit></b> followed by <b><current +="" 1="" segment=""></current></b> to display the current segment for editing.	
NN = current setting	Enter the new value for the current segment number and press <enter>.</enter>	

#### 3.6 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys, exits the Menu function.

#### **New Code**

Display	Action	
MENU- MAIN NEW CODE?	Press <yes> to enter a new code using the SELECT CODE prompt. Refer to Section 2.3 for more information on codes.</yes>	
	Press <b><no></no></b> to resume the game in progress using the current data and exit the Menu.	
	Press the down arrow key to scroll to the next selection.	

# **Warning Time**

Display	Action
WARNING TIME MM:SS*	Enter the warning time in minutes and seconds and press <b><enter></enter></b> .
MM:SS = minutes, seconds	Enter 00:00 for no warning time (default).
	When the warning time is reached, the segment number flashes until the main clock reaches zero.

# **Dimming Menu**

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN%	Use the keypad or arrow keys to select the intensity for the digits on the scoreboard.
NN = current level NONE = bright <0> 90% = <1>	Press <b><no></no></b> to resume the game in progress using the current data and exit the Menu.
80% = <2> 70% = <3> 60% = <4>	Press the down arrow key to scroll to the next selection.
50% = <5> 40% = <6> 30% = <7>	
20% = <b>&lt;8&gt;</b> 10% = <b>&lt;9&gt;</b>	

# **Default Settings**

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3	Custom 4
First Segment	1				
Last Segment	99				
Warning Timer	00:00				
Display Interval	No				
Auto Stop on Each Segment	No				
Auto Stop At Last Segment	Yes				

# **Section 4: Basketball Operations**

Sport Insert: LL-2433

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**.

#### **Reference Drawings:**

Insert, Basketball, LL-2433	Drawing A-120121
Block Diagram: AS5000 BB- VB and WR #1	Drawing A-124686
Block Diagram: AS5000 BB- VB and WR #3	Drawing A-124688
Insert; LL-2442 A/S 5000, Team Name	Drawing A-125290
Block Diagram- A/S 3000 or 5000 BB- VB and WR #2	Drawing A-125415

Refer to the information in Section 2 to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

Write the correct code number here:		

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

# 4.1 Basketball Keys

### **Set Shot Time**

Display	Action	
SHOT CLOCK-EDIT CURR MM:SS*	Press <b><set b="" shot="" time<=""> •&gt; to display the current shot clock time length.</set></b>	
MM:SS = minutes, seconds	To accept the current shot clock time length press <b><yes></yes></b> .	
	To decline the selection of the current shot clock time length press <no>.</no>	
	Use the keypad to enter the new time in minutes and seconds and press <b><enter></enter></b> .	
	Press <b><clear></clear></b> twice to clear changes and return to the game.	

Display	Action		
SHOT CLOCK-EDIT RESET 1 MM:SS*	Press <b><set b="" shot="" time<=""> •&gt; a second time to display the configured time for shot clock <b>Reset 1</b> length.</set></b>		
MM:SS = minutes, seconds	To accept the shot clock <b>Reset 1</b> length press <b><yes></yes></b> .		
	To decline the selection of the shot clock <b>Reset 1</b> length, press <b><no></no></b> .		
	Use the keypad to enter the new time in minutes and seconds and press <b><enter></enter></b> .		
	Press <b><clear></clear></b> twice to clear changes and return to the game.		
	Note: The configured time of shot clock is set using the EDIT SETTINGS function when a new code is selected.		
SHOT CLOCK-EDIT RESET 2 MM:SS*	Press <b><set b="" shot="" time<=""> •&gt; a third time to display the configured time for shot clock <b>Reset 2</b> length.</set></b>		
MM:SS = minutes, seconds	To accept the shot clock <b>Reset 2</b> length press <b><yes></yes></b> .		
	To decline the selection of the shot clock <b>Reset 2</b> length press < <b>NO&gt;</b> .		
	To change the shot clock <b>Reset 2</b> length and set the shot clock enter the new time in minutes and seconds on the number pad and press <b><enter></enter></b> .		
	Press <b><clear></clear></b> twice to clear changes and return to the game.		
	Note: The configured time of shot clock is set using the EDIT SETTINGS function when a new code is selected.		

# **Recall Shot Time**

Display	Action
SHOT CLOCK-MODE RECALL Y/N	Press <recall shot="" time="" •=""> to recall the shot time that was remaining before the last shot clock reset was pressed.</recall>
	To accept the recall press <b><yes></yes></b> .
	To decline the recall press <b><no></no></b> .

#### Time Out On/Off

**<TIME OUT ON/OFF>** stops and starts the time out clock. The length of both the full and partial time outs can also be changed when the time out clock is stopped.

**Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-SELECT FULL MM:SS	Press <time off="" on="" out=""> to display the configured time for full time out length.</time>
MM:SS = minutes, seconds	To start the full time out press <b><yes></yes></b> .
	To decline the selection of the full time out press <b><no></no></b> .
TIME OUTS-SELECT PARTIAL MM:SS  MM:SS = minutes, seconds	Press <b><time off="" on="" out=""></time></b> a second time (or use the up and down arrow keys) to display the configured time for partial time out length.
	To start the partial time out press <b><yes></yes></b> .
	To decline the selection of the partial time out press <b><no></no></b> .

# **Blank Player Foul**

Press **<BLANK PLAYER FOUL>** to blank the digits of the Player-Foul field of the scoreboard.

#### Period +1

Display	Action
PERIOD- +1 N N = current setting	Press <period +1=""> to increment the period number. The full and partial time outs and team fouls are automatically reset at halftime.</period>

#### **Time Out**

The home and guest **<TIME OUT>** keys are used to decrement the number of time outs remaining and start the time out clock. The scoreboard indicator is turned on when the type of time out is selected (full or partial). The scoreboard indicator is turned off when the time out clock expires or is stopped.

**Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N N = current setting	Press <time out=""> to display the number of full time outs remaining.  To accept the full time out and start the time out clock press <yes>.  To decline the selection of a full time out press <no>.</no></yes></time>
TIME OUTS-HOME PARTIAL N N = current setting	Press <b><time out=""></time></b> a second time (or use the up and down arrow keys) to display the number of partial time outs remaining.  To accept the partial time out and start the time out clock press <b><yes></yes></b> .  To decline the selection of a partial time out press <b><no></no></b> .
TIME OUTS-HOME OFF	To exit the running time out clock, press <b><time out=""></time></b> .  This will turn the time out OFF.
TIME OUTS-HOME NO TIME OUTS	This message appears when there are no full or partial time outs left.

# Score +1, +2, +3, -1

The home and guest <SCORE +1>, <SCORE +2>, and <SCORE +3> keys are used to increment the team score and the <SCORE -1> key is used to decrement the team score.

Display	Action
TEAM SCORE- +1 HOME NNN NNN = current setting	Press the appropriate score key to increment or decrement the score for the home or guest team.  The LCD shows which key was pressed and the new value for the team score of the corresponding team.
TEAM SCORE- +1 HOME PLAYER NN* NN = current setting	If the program is configured to update the player points, this prompt displays asking for a player number.  Enter the jersey number of the player who scored the points and press <b><enter></enter></b> .
HOME PLAYER NN NOT FOUND, ADD?  NN = current setting	If the player is not in the roster, this prompt asks if the player should be added.  Press <b>YES&gt;</b> to add the player to the roster and credit the points to that player.  Press <b>NO&gt;</b> to decline the entry of the player number.
HOME PLAYER NN ROSTER FULL NN = current setting	This message displays when the answer to the previous prompt is <b>YES</b> and the roster is full.
HOME PLAYER NN POINTS XX  NN = player number XX = player points	The player's jersey number and number of points display if the player was found in the game or correctly added to the roster.

# Team Fouls +1

Display	Action
TEAM FOULS- +1 HOME NN NN = current setting	Press the home or guest <b><team +1="" fouls=""></team></b> key to increment the number of team fouls for the corresponding team. The number of team fouls stop incrementing at the number of fouls configured for the 1-on-1 or 2-shot bonus.
TEAM FOULS- +1 HOME PLAYER NN* NN = current setting	If the program is configured to update the player fouls, this prompt displays asking for a player number.  Enter the jersey number of the player who made the foul and press <b><enter></enter></b> .
HOME PLAYER NN NOT FOUND, ADD?	If the player is not in the roster, this prompt asks if the player should be added.  Press <yes> to add the player to the roster and credit the foul to that player.  Press <no> to decline the entry of the player number.</no></yes>
HOME PLAYER NN ROSTER FULL NN = current setting	This message displays when the answer to the previous prompt is <b>YES</b> and the roster is full.
HOME PLAYER NN FOULS XX  NN = player number  XX = player fouls	The player's jersey number and the number of fouls display if the player was found in the game or correctly added to the roster.  Note: If a player number is not entered, the fouls will not be displayed.

#### **Bonus**

**Note:** Only the types of bonuses that were configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
HOME BONUS 1-0N-1	Press the home or guest <b><bonus></bonus></b> key to turn on the 1-on-1 bonus indicator for that team.
HOME BONUS 2-SHOT	Press the home or guest <b><bonus></bonus></b> key a second time to turn on the 2 shot bonus indicator for that team.

Display	Action
HOME BONUS OFF	Press the <b><bonus></bonus></b> key a third time to turn off both indicators.

### **Possession**

Display	Action
HOME POSSESSION ON	Press the home or guest <b><poss></poss></b> key to turn on the possession indicator for that team.
HOME POSSESSION OFF	To turn off the possession indicator, press the same <b><poss></poss></b> key a second time, or press the opposite <b><poss></poss></b> key once.

### In Game/Out of Game

The **<IN GAME>** and **<OUT OF GAME>** keys are only functional when the Home or Guest **<PLAYER>** key has been pressed. Refer to **Subsection Player**.

### **Delete Player**

The **<DELETE PLAYER>** key is only functional when the Home or Guest **<PLAYER>** key has been pressed. Refer to **Subsection Player**.

### **Player**

**Note:** If player stats are being received from the Daktronics Scoring-Timing Interface (DSTI) the PLAYER, IND SUB and MASS SUB keys will be disabled. The LCD displays the messages below when these keys are pressed. Refer to **ED-13650** for more information about DSTI.

Display	Action
STATS RECEIVED KEY DISABLED  EXIT STATS MODE Y/N?	The key disabled message will display for one second and then the <b><exit stats=""></exit></b> message will display and wait for a <b><yes></yes></b> or <b><no></no></b> key. If the <b><yes></yes></b> key is pressed, stats data will be saved in the console and the console will <b><exit stats=""></exit></b> mode until another stats packet is received. This will allow the operator to enter player stats from the console if the DSTI connection is lost.

Display	Action
HOME PLAYER NN*  NN = current setting	When the home or guest <b><player< b=""> •&gt; key is pressed, this prompt asks the jersey number of the player to be edited.  Enter the jersey number on the number pad and press <b><enter></enter></b>.</player<></b>
HOME PLAYER NN NOT FOUND, ADD?  NN = current setting	If the player is not in the roster, this prompt asks if the player should be added.  Press < <b>YES</b> > to add the player to the roster.  Press < <b>NO</b> > to decline the entry of the player number.
HOME PLAYER NN ROSTER FULL  NN = current setting	This message displays when the answer to the previous prompt is <b>YES</b> and the roster is full.
HOME PLAYER NN S-I F-X* P-YY  NN = player number  S-I = in game S-O = out of game  X = number of fouls YY = number of points	If the player is found, the player's game status and statistics can be changed.  To change a player's game status:  1. Use the up and down arrow keys to select the player from the list.  2. Press <in game=""> or <out game="" of="">.  3. The S field on the display changes to show the player's current status.</out></in>
	<ol> <li>Use the up and down arrow keys to select the player from the list.</li> <li>Use the left and right arrow keys to select the statistic to be changed.</li> <li>Enter the correct number for the selected statistic on the number pad and press <enter>.</enter></li> <li>Press <clear> to exit the menu and return to the game.</clear></li> </ol>

Display	Action
HOME PLAYER NN DELETE PLAYER? NN = current setting	To delete an incorrect player from the roster use the up and down arrow keys to select the player from the list and press <pre> <delete player="">.</delete></pre> Press <pre> Press <pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>
	Press <b><no></no></b> to decline the deletion process and return to the game.

## **Individual Substitution**

Display	Action
IND SUB- HOME NN* in for XX	When the home or guest <b><indiv. sub.="" •=""></indiv.></b> key is pressed, this prompt asks the jersey number of the player entering and leaving the game.
NN = sub player XX = in game player	Enter the jersey number of the player entering the game on the number pad and press <b><enter></enter></b> .
	Enter the jersey number of the player leaving the game on the number pad and press <b><enter></enter></b> .
IND SUB- HOME SUB OK	This message is displayed if no errors are found.
IND SUB- HOME SUB NOT MADE	This message is displayed for the following reasons:  The player going into the game is already marked as in.  The player coming out of the game is not marked as in.
NOT FOUND, ADD? NN* in for	This message is displayed if the player going in the game is not found in the roster.
NN = current setting	Press <b><yes></yes></b> to add the player to the roster.
	Otherwise, press <b><no></no></b> followed by <b><indiv. sub.="" •=""></indiv.></b> to try entering the sub again.
IND SUB- HOME NOT FOUND NN	This message is displayed if the player going out of the game is not found in the roster.
NN = current setting	Press <indiv. sub.="" •=""> to try entering the sub again.</indiv.>

### **Mass Substitution**

Display	Action
MASS SUB-HOME PLAYER 1 NN * NN = current setting	After the home or guest <b><mass b="" sub.<=""> •&gt; key is pressed, the LCD will display a message asking for the first of five player numbers that are going into the game. Enter the jersey number on the number pad and press <b><enter></enter></b> for each of the five players. Press <b><clear></clear></b> at any time to exit the Mass Substitution function.</mass></b>
MASS SUB-HOME SUB OK	This message is displayed if no errors are found.
MASS SUB-HOME DUPLICATE NN	This message displays for each duplicate jersey number found for the five players going into the game.
NN = current setting	Press <b><yes></yes></b> to correct the jersey number.
	Enter the correct jersey number and press <b><enter></enter></b> .
NOT FOUND, ADD? PLAYER 1 NN	This message displays for each player not found in the roster.
TEHTER 1 IIII	Press <b><yes></yes></b> to add the jersey number.
NN = current setting	Press <b><no></no></b> to ignore and select another jersey number.
	Enter the correct jersey number and press <b><enter></enter></b> .

## **4.2** Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

### **Time Out**

**Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N*	Press <b><edit></edit></b> followed by <b><time out=""></time></b> for the home or guest team to display the current setting of full time outs.
N = current setting	Enter the correct number of full time outs on the number pad and press <b><enter></enter></b> .

Display	Action
TIME OUTS-HOME PARTIAL N*	After accepting or rejecting the number of full time outs, the number of partial time outs is displayed.
N = current setting	Enter the correct number of partial time outs on the number pad and press <b><enter></enter></b> .

# Score +1, +2, +3, -1

Display	Action
TEAM SCORE- EDIT HOME NNN*  NNN = current setting	Press <b><edit></edit></b> and any of the <b>SCORE</b> keys for the home or guest team to display the current team score setting.  Enter the correct team score on the number pad and press <b><enter></enter></b> .

## Team Fouls +1

Display	Action
TEAM FOULS- EDIT HOME N*	Press <b><edit></edit></b> followed by <b><team fouls=""></team></b> for the home or guest team to display the current team foul setting.
N = current setting	Enter the correct number of team fouls on the number pad and press <b><enter></enter></b> .

# Period +1

Display	Action
PERIOD- EDIT	Press <b><edit></edit></b> followed by <b><period +1=""></period></b> for the home or guest team to display the period setting.
N = current setting	Enter the correct period number on the number pad and press <pre><enter>.</enter></pre>

### Time Out On/Off

es <b><edit></edit></b> followed by <b><time off="" on="" out=""></time></b> to display current time setting for full time outs.  Her the correct time on the number pad and press of the correct time of t
er accepting or rejecting the full time outs time setting, partial time outs time setting is displayed.  er the correct time on the number pad and press
:: :::

## 4.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys, exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

### **New Game**

Display	Action
MENU- MAIN NEW GAME?	Press <b><yes></yes></b> to clear all of the program data for the last game played or the game in progress and begin running the selected sport.
	Press <b><no></no></b> to resume the game in progress using the current data and exit the Menu.
	Press the down arrow key to scroll to the next selection.

## **New Code**

Display	Action
MENU- MAIN NEW CODE?	Press <yes> to enter a new code using the SELECT CODE prompt. Refer to Section 2.3 for more information on codes.  Press <no> to resume the game in progress using the current data and exit the Menu.</no></yes>
	Press the down arrow key to scroll to the next selection.

# **Dimming Menu**

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN%	Press <0> through <9> or use the arrow keys to select the intensity for the digits on the scoreboard.
NN = current level	Press <b><no></no></b> to resume the game in progress using the current
NONE = bright <0>	data, and exit the Menu.
90% = <1>	
80% = <b>&lt;2&gt;</b>	Press the down arrow key to scroll to the next selection.
70% = <b>&lt;3&gt;</b>	
60% = <b>&lt;4&gt;</b>	
50% = <b>&lt;5&gt;</b>	
40% = <6>	
30% = <7>	
20% = <8>	
10% = <9>	

## **Home Roster, Guest Roster**

**Home Roster** and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
MENU- ROSTER SELECT HOME	Press <b><enter></enter></b> or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD.
	Press <b><clear></clear></b> to resume the game in progress using the current data and exit the Menu.
	Press the down arrow key to scroll to the next selection.
HOME- TEAM NAME EDIT SETTINGS?	Press <b><enter></enter></b> or the right or left arrow key to select the Team Name Edit Settings submenu.
	Press <b><clear></clear></b> to move on and edit the team name that will be displayed.
HOME- TEAM NAME SELECT WIDTH	Press <b><enter></enter></b> to select the width (in pixels) of the Team Name Message Centers (TNMC) used on the scoreboard.
HOME- TEAM NAME SIZE NN	Select from 16, 32, 48, or 64 and then press <b><enter></enter></b> .
NN = current setting	

Display	Action
Display	Action
HOME- TEAM NAME SELECT FONT	On the following screen, press <b><enter></enter></b> to select the display font of the team name.
HOME- TEAM NAME 8H SINGLE	Select one of the following font types:  • 8H SINGLE (single stroke)  • 8H BOLD (double stroke)  • 8H NARROW (single stroke, alternate narrow)  • 8H NARROW BOLD (double stroke, alternate narrow)
	After selecting a font type, press <b><enter></enter></b> .
	Refer to <b>Section 2.8</b> for more information on TNMC width and font selection.
	Press <b><no></no></b> to move on and edit the team name that will be displayed.
HOME- TEAM NAME _OME *	The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.
	The TNMC is updated after each selection is completed.
	Use the COLUMNS, ROWS and STROKE keys to select the WIDTH, HEIGHT and FONT of the TNMC. Refer to Section 2.8 for more information about team name entry.
	Enter up to fifteen (15) characters for the team name and press <b><enter></enter></b> .
	Reinsert the BASKETBALL (LL-2433) insert to continue.
HOME- TEAM ABBR EDIT SETTINGS?	Press <b><enter></enter></b> or the right or left arrow key to select the Team Abbreviation Edit Settings submenu.
	Press <b><clear></clear></b> to move on and edit the team abbreviation that will be displayed.
HOME- TEAM ABBR SELECT WIDTH	Press <b><enter></enter></b> to select the width (in pixels) of the Team Name Message Centers (TNMC) used on the scoreboard.
HOME- TEAM ABBR SIZE NN	Select from 16, 32, 48, or 64 and then press <b><enter></enter></b> .
NN = current setting	

Display	Action
HOME- TEAM ABBR SELECT FONT  HOME- TEAM ABBR 8H SINGLE	On the following screen, press <b><enter></enter></b> to select the display font of the team name.  Select one of the following font types:  • 8H SINGLE (single stroke)  • 8H BOLD (double stroke)  • 8H NARROW (single stroke, alternate narrow)  • 8H NARROW BOLD (double stroke, alternate narrow)  After selecting a font type, press <b><enter></enter></b> .  Refer to <b>Section 2.8</b> for more information on TNMC width and font selection.  Press <b><clear></clear></b> to move on and edit the team abbreviation that will be displayed.
HOME- TEAM ABBR _OME *	The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.  The TNMC is updated after each selection is completed.  Use the COLUMNS, ROWS and STROKE keys to select the WIDTH, HEIGHT and FONT of the TNMC. Refer to Section 2.8 for more information about team name entry.  Enter up to ten (10) characters for the team abbreviation and press <enter>.  Reinsert the BASKETBALL (LL-2433) insert to continue.</enter>
MENU- HOME EDIT PLAYERS?	Press <b><yes></yes></b> to assign the jersey numbers for all the players in the roster.  Press <b><no></no></b> or the left arrow key to exit the submenu and return to the Main menu.
MENU- HOME PLAYER Ø1 NN*  NN = current setting	Once Edit Players is selected, enter the jersey number for that player from the official roster and press <b><enter></enter></b> . The next player is shown on the LCD. Continue entering the jersey numbers for up to 15 players.  Press <b><clear></clear></b> to advance to the next option.

Display	Action
MENU- HOME CLEAR STATS?	This function clears all game statistics and should only be used before the start of a game.
	Press <b><yes></yes></b> to clear the in-game status fouls, and points for all players in the home roster.
	Press <no> to decline the selection.</no>

## **Display Menu**

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, update the scoreboard drivers, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press <b><yes></yes></b> to select the Display submenu and show the first prompt on the LCD.  Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN SEGMENT TIMER?	<b>Note:</b> The segment timer function is disabled while the clock is running.
	Press <b><yes></yes></b> to exit the sport code and run the segment timer program.
	Press <b><no></no></b> or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	This prompt confirms that the user wants to exit the sport code and enter the segment timer.
	<b>Note:</b> The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings.
	Refer to <b>Section 3</b> for more information on the segment timer.
MENU- DISPLAY	Press <b><yes></yes></b> to select the blank scoreboard feature.
BLANK SCBD?	The scoreboard will go blank and wait for the operator to press any key to resume normal operation.
PRESS ANY KEY TO RETURN TO GAME	Press the down arrow key to scroll to the next selection.

Display	Action
MENU-DISPLAY RUN DOWNLOAD Y/N?	This menu function allows for the downloading of the driver program to update the driver software.  This is used along with DakLoader software running on a computer connected to the J5 port on the AS-5500. For downloading instructions, refer to ED-18728 in <b>Appendix D</b> .
MENU-DISPLAY SYNC TO CHAN  SYNC TO CHAN ON 1-ON, 2-OFF	Press <yes> to view or set the radio sync to channel setting.  The LCD will show if the setting is ON or OFF. Press &lt;1&gt; to turn it on, or press &lt;2&gt; to turn it off.  Note: This setting should remain ON unless instructed by Daktronics to turn it off.</yes>
MENU- DISPLAY CLOCK CAPTIONS  CLOCK CAPTION- 1-ON, 2-OFF ON	Press <b><yes></yes></b> to view or set the clock caption setting.  The LCD will show if the setting is ON or OFF. Press <b>&lt;1&gt;</b> to turn it on, or press <b>&lt;2&gt;</b> to turn it off.  Press the down arrow key to scroll to the next selection.
MENU- DISPLAY SET RTD OFFSET  RTD OFFSET ØK Ø 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament).  Press <yes> to set the RTD offset.  Press &lt;1&gt; to offset the RTD by 5000, &lt;2&gt; to offset by 10000, or &lt;3&gt; to offset by 15000. Press &lt;0&gt; to clear the offset.</yes>

# **Edit Settings**

Display	Action
MENU- MAIN EDIT SETTINGS?	Press <b><yes></yes></b> or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD.  Refer to <b>Section 4.4</b> .
	Press <b><no></no></b> to resume the game in progress using the current data and exit the Menu.  Press the down arrow key to scroll to the next selection.

## **Color Menu**

The Color Menu allows the user to select the settings for color control of the clock and the score digits.

Display	Action
MENU- MAIN ENTER COLOR MENU	Press <b><yes></yes></b> to select the color sub menu and show the menu on the LCD.
	Press the down arrow key to scroll to the next selection.
COLOR MENU CLOCK COLOR	Press <b><yes></yes></b> to select the clock color selection.
	Press the down arrow key to scroll to the next selection
CLOCK COLOR -ON 1-ON, 2-OFF	The current setting for clock color control will be shown as <b>ON</b> or <b>OFF</b> . Press <b>&lt;1&gt;</b> to set <b>ON</b> or <b>&lt;2&gt;</b> to set <b>OFF</b> .
ALERT TIME MM: 55*  MM:SS = minutes, seconds	If set <b>ON</b> , the clock color will be green for RUN and red for STOP. The operator can set an alert time when the clock will go amber. Set the alert time to 0:00 if none is used.
CLOCK DEFAULT COLOR =GRN	If the clock color control is set OFF, the operator can select a default color for the clock. Press the up or down arrow key to select a color.
COLOR MENU SCORE COLOR	Press <b><yes></yes></b> to select the score color selection.  Press the down arrow key to scroll to the next selection.
SCORE COLOR -ON 1-ON, 2-OFF	The current setting for score color control will be shown as <b>ON</b> or <b>OFF</b> . Press <1> to set <b>ON</b> or <2> to set <b>OFF</b> .
HIGH SCORE COLOR =GRN  LOW SCORE COLOR =RED  TIE SCORE COLOR =AMB	If set to <b>ON</b> , the color of the score can be selected for the larger, smaller, and tied score.  Press the up or down arrow key to select a color.  Press <b><enter></enter></b> when the desired color is shown.
COLOR =AMB	

Display	Action
HOME SCORE COLOR =GRN	If set to <b>OFF</b> , the default color for <b>HOME</b> and <b>GUEST</b> scores can be selected.
GUEST SCORE COLOR =RED	Press the up and down arrow key to select a color.  Press <b><enter></enter></b> when the desired color is shown.

# Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press <b><yes></yes></b> or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD.  Press <b><no></no></b> to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press <1> or <2> to display the time of day in 12 hour (default) or 24 hour format.  Press <enter> or the down arrow key to scroll to the next selection.</enter>
MENU-TIME OF DAY TOD HH: MM: SS*  HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press <b><enter></enter></b> .  Press <b><enter></enter></b> or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD	Press <1> or <2> to display the game clock (default) or the time of day clock on the scoreboard.  Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed.  Press <b><enter></enter></b> to blank all game data on the scoreboard except for the Time of Day digits.

# 4.4 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

### **Number of Periods**

Display	Action
NO. OF PERIODS=N 2 OR 4? N = current setting	The No. of Periods indicates whether the game consists of two halves or four quarters  Press <2> or <4> on the number pad to choose the desired number of periods.

### **Main Clock**

**Note 1:** The settings for the **Main Clock** are used with the **SET MAIN CLOCK>** key.

**Note 2:** The period, break and overtime lengths are used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
MAIN CLOCK-MODE TENTH SECOND? Y	When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute.  Press <b>YES</b> > to set the main clock to display tenths of a second.  Press <b>NO</b> > to display whole seconds.
MAIN CLOCK-TIME PERIOD MM:SS*  MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press <b><enter></enter></b> .  For example, 20:00 per half or 8:00 per quarter  Note: Pressing <b><enter></enter></b> to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.

Display	Action
MAIN CLOCK-TIME BREAK MM:SS*  MM:SS = minutes, seconds	Set the amount of time between periods.  Enter the correct amount of time for break length in minutes and seconds on the number pad and press <b><enter></enter></b> .  For example, 1:00
MAIN CLOCK-TIME OVERTIME MM:SS*  MM:SS = minutes, seconds	Set the amount of time for the overtime periods.  Enter the correct amount of time for overtime periods in minutes and seconds on the number pad and press <enter>.  For example, 5:00</enter>

## **Shot Clock**

Display	Action
SHOT CLOCK-TIME	This setting is used for the <b><reset></reset></b> button on the remote shot clock control console.
RESET 1 MM:SS*	<b>Note:</b> The current setting for the <b><reset></reset></b> time displays on the LCD until the first number key is pressed.
SHOT CLOCK-TIME RESET 2 MM:SS*	Enter the correct amount of reset time in minutes and seconds on the number pad and press <b><enter></enter></b> .
MM:SS = minutes, seconds	For example, 00:45
SHOT CLOCK-MODE SYNC W/ MAIN? Y	Press <b><yes></yes></b> to synchronize the shot clock with the main clock.
	If <b><stop></stop></b> for the main clock is pressed while the main and shot clocks are running, the shot clock stops. The shot clock restarts when <b><start></start></b> is pressed for the main clock.
	Press <b><no></no></b> to allow the shot clock to run independently of the main clock. The shot clock starts and stops only with the switch on the remote shot clock control console.
SHOT CLOCK-MODE AUTO BLANK? Y	Press <b><yes></yes></b> to blank the shot clock time when the shot clock time is greater than or equal to the main clock time. The shot clock is reset and stopped when the display is blanked to eliminate inadvertent sounding of shot clock horn.  Press <b><no></no></b> to display the shot clock time at all times.

### **Time Outs**

**Note 1:** If a full or partial time out is not needed for the HOME or GUEST **<TIMEOUT>** keys, enter zero for the number of time outs.

**Note 2:** If a full or partial time out is not needed for **<TIME OUT ON/OFF>**, enter zero for the time.

**Note 3:** The number for each type of time out must be manually entered for an overtime period using the **<EDIT><TIMEOUT>** key sequence for each team.

Display	Action
TIME OUTS- MODE FULL N * N = current setting	Enter the number of full time outs on the number pad and press <b><enter></enter></b> .
TIME OUTS- TIME FULL MM:SS*  MM:SS = minutes, seconds	Enter the amount of time for a full time out in minutes and seconds on the number pad and press <b><enter></enter></b> .  For example, 1:00
TIME OUTS- MODE WARNING MM:SS*  MM:SS = minutes, seconds	A warning horn can be configured to signal the end of a full time out. While the time out clock is counting down, the horn will sound for one second when the warning time is reached. Enter a zero for the time to disable the warning horn.  Enter the time in minutes and seconds on the number pad and press <b><enter></enter></b> .
TIME OUTS- MODE PARTIAL N * N = current setting	Enter the number of partial time outs on the number pad and press <b><enter></enter></b> .
TIME OUTS- TIME PARTIAL MM:SS*  MM:SS = minutes, seconds	Enter the amount of time for a partial time out in minutes and seconds on the number pad and press <b><enter></enter></b> .  For example, 00:20
TIME OUTS- MODE PRTL WARN MM:SS*  MM:SS = minutes, seconds	A warning horn can be configured to signal the end of a partial time out. While the time out clock is counting down, the horn will sound for one second when the warning time is reached. Enter a zero for the time to disable the warning horn.
	Enter the time in minutes and seconds on the number pad and press <b><enter></enter></b> .

Display	Action
TIME OUTS-MODE SHOW ON MAIN? N	Press <yes> to display the time out time on the LCD and the main clock digits of the scoreboard while the time out clock is active.  Press <no> to display the time out time on the LCD only.</no></yes>

## **Team Score**

Display	Action
TEAM SCORE- MODE UPDATE PLAYER? Y	This feature must be enabled for statistics displays.  Press <yes> to allow entry of a player number after the home or guest team score are incremented or decremented.</yes>
	Press <b><no></no></b> to prevent entry of a player number.

## **Team Fouls**

Display	Action
TEAM FOULS- MODE UPDATE PLAYER? Y	This feature must be enabled for statistics displays.  Press <yes> to allow entry of a player number after the home or guest team fouls are incremented or decremented.  Press <no> to prevent entry of a player number.</no></yes>
TEAM FOULS- MODE 1-0N-1 BONUS N * N = current setting	Enter the number of team fouls permitted before the 1-on-1 bonus applies on the number pad and press <b><enter></enter></b> .  The home and guest team fouls stop incrementing at this number unless the 2-shot bonus is enabled.  Enter zero to disable this feature.
TEAM FOULS- MODE 2 SHOT BONUS NN*  NN = current setting	Enter the number of team fouls permitted before the 2-shot bonus applies on the number pad and press <b><enter></enter></b> .  Enter zero to disable this feature.

# **Select Captions**

Display	Action
SELECT CAPTIONS ON 1←→ 2 OFF	This menu option allows for the controlled backlit captions to be turned ON/OFF.  Press the <1> key to select ON and OFF for captions controlled by control #1.
	Press the <2> key to select ON and OFF for captions
	controlled by control #2.

# **Select Team Foul Display**

Display	Action
TEAM FOULS SHOW ON STATS? Y	This menu option allows the selection of showing team fouls on line 6 of the player stats panel.  To accept display of team fouls, press <b><yes></yes></b> .  To decline display of team fouls, press <b><no></no></b> .

# **Score by Quarter**

Display	Action
SCORE BY QUARTER Y/N? N	This feature allows for scores to be recorded by quarter.  This data is available on the RTD output.  Press <b><yes></yes></b> to score by quarter or press <b><no></no></b> to not score by quarter.
	Note: If this feature is enabled, all scores are edited by
	quarter. Use this function only when needed.

## **Shot Horn Control**

Display	Action	
SHOT HRN CONTROL SET= SHOT HORN	This menu option allows the selection of what will control the output for the shot clock horn. Use the left or right arrow keys to scroll to the desired setting or use the number keys (0-3) as short cuts.	
	Press <b><enter></enter></b> when th	e desired setting is shown.
	0= NO CONTROL	1= MAIN HORN
	2= SHOT HORN	3= MAIN & SHOT

## **Light Control**

Display	Action	
LIGHT CONTROL SET= CLK=0	output for the light strip of keys to scroll to the desi (1-6) as short cuts.	the selection of what will control the displays. Use the left or right arrow red setting or use the number keys he desired setting is shown.  2= CLK STOP 4= MAIN HORN 6= STOP & HRN

### **Switch Output**

The All Sport<sup>®</sup> 5500 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK=0.

To display the desired switch setting:

- 1. Press the number (0, 1, 2, 3) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.
- **2.** Press **YES>** to select the new setting.
- **3.** Press **NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED?  N = current setting	The switch remains open at all times and any external devices are disabled.
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered.  In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.

Setting	Result
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when <b><horn></horn></b> is pressed.

# **Default Settings**

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Number of Periods	4			
Tenth of a Second	Yes			
Period Length	8:00			
Break Length	10:00			
Overtime Length	5:00			
Shot Clock Reset 1	0:45			
Shot Clock Reset 2	0:30			
Sync Shot with Main	Yes			
Shot Clock Auto Blank	Yes			
Full Time Outs	3			
Full Time Out	1:00			
Time Out Warning	0:00			
Partial Time Outs	2			
Partial Time Out	00:20			
Partial Time Out Warn	0:00			
Show on Main	No			
Update Player Score	No			
Update Player Fouls	Yes			
1-on-1 Bonus	5			
2-Shot Bonus	0			
Select Captions	1-ON			
Show Fouls on Stats	No			
Score by Quarter	No			
Shot Horn Control	Main Horn			
Light Control	Clk=0			
Switch Output	1-Clock = 0			

# **Section 5: Volleyball Operations**

Sport Insert: LL-2434

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**.

#### **Reference Drawings:**

Block Diagram: AS5000 BB- VB and WR #1	Drawing A-124686
Block Diagram: AS5000 BB- VB and WR #3	Drawing A-124688
Insert; LL-2434 A/S 5000, Volleyball	
Insert; LL-2441 A/S 5000, Team Name	•
Block Diagram- A/S 3000 or 5000 BB- VB and WR #2	•

Refer to the information in Section 2 to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

## 5.1 Volleyball Keys

#### Time Out On/Off

**<TIME OUT ON/OFF>** stops and starts the time out clock. The length of both the full and partial time outs can also be changed when the time out clock is stopped.

**Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-SELECT FULL MM:SS	Press <b><time off="" on="" out=""></time></b> to display the configured time for full time out length.
MM:SS = minutes, seconds	To start the full time out press <b><yes></yes></b> .
	To decline the selection of the full time out press <b><no></no></b> .

Display	Action
TIME OUTS-SELECT PARTIAL MM:SS	Press <time off="" on="" out=""> a second time (or use the up and down arrow keys) to display the configured time for partial time out length.</time>
MM:SS = minutes, seconds	To start the partial time out press <b><yes></yes></b> .
	To decline the selection of the partial time out press <b><no></no></b> .

### **Time Out**

The home and guest **<TIME OUT>** keys are used to decrement the number of time outs remaining and start the time out clock. The scoreboard indicator is turned on when the type of time out is selected (full or partial). The scoreboard indicator is turned off when the time out clock expires or is stopped.

**Note:** Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N N = current setting	Press <time out=""> to display the number of full time outs remaining.  To accept the full time out and start the time out clock press <yes>.  To decline the selection of a full time out press <no>.</no></yes></time>
TIME OUTS-HOME PARTIAL N N = current setting	Press <b><time out=""></time></b> a second time (or use the up and down arrow keys) to display the number of partial time outs remaining.  To accept the partial time out and start the time out clock press <b><yes></yes></b> .  To decline the selection of a partial time out press <b><no></no></b> .
TIME OUTS-HOME OFF	To exit the running time out clock, press <b><time out=""></time></b> . This will turn the time out OFF.
TIME OUTS-HOME NO TIME OUTS	This message appears when there are no full or partial time outs left.

## Match Number +1, Sets +1

The **<MATCH NUMBER +1>** and **<SETS +1>** keys are both used to increment their respective totals. **<SETS +1>** is used as an example.

Display	Action
SET NO: +1	Press the appropriate key to increment statistics for the home or guest team.
N = current setting	The LCD shows which key was pressed and the new value for the corresponding team.

### Score +1, -1

The home and guest **<SCORE +1>** and **<SCORE -1>** keys are used to increment and decrement the team score.

Display	Action
TEAM SCORE: +1 HOME NN	Press the appropriate score key to increment or decrement the score for the home or guest team.
NN = current setting	The LCD shows which key was pressed and the new value for the team score of the corresponding team.

### Sets Won +1

The home and guest keys are used to increment their respective totals.

Display	Action
SETS WON: +1 HOME NN	Press the <b><sets +1="" won=""></sets></b> key to increment the number of sets won by the home or guest team.
NN = current setting	The LCD shows which key was pressed and the new value for the corresponding team.

# Aces, Kills, Blocks, and Digs

The home and guest <ACES +1>, <KILLS +1>, <BLOCKS +1> and <DIGS +1> keys are all used to increment their respective totals. <ACES +1> is used as an example.

Display	Action
ACES: +1 HOME NNN	Press the appropriate key to increment statistics for the home or guest team.
NNN = current setting	The LCD shows which key was pressed and the new value for the corresponding team.
ACES: +1 HOME PLAYER NN*	If the program is configured to update the player stats, this prompt displays asking for a player number.
NN = current setting	Enter the jersey number of the player who made the play and press <b><enter></enter></b> .
HOME PLAYER NN NOT FOUND, ADD?	If the player is not in the roster, this prompt asks if the player should be added.
NN = current setting	Press <b><yes></yes></b> to add the player to the roster and credit the play to that player.
	Press <b><no></no></b> to decline the entry of the player number.
HOME PLAYER NN ROSTER FULL NN = current setting	This message displays when the answer to the previous prompt is <b>YES</b> and the roster is full.
HOME PLAYER NN ACES XX  NN = player number XX = current stat value	The player's jersey number and stats display if the player was found in the game or correctly added to the roster.

### Serve

Display	Action
HOME SERVE ON	Press the home or guest <b><serve></serve></b> key, to turn on the possession indicator for that team.
HOME SERVE OFF	To turn off the possession indicator, press the same <b><serve></serve></b> key a second time or press the opposite <b><serve></serve></b> key.

#### In Game/Out of Game

The **IN GAME** and **OUT OF GAME** keys are only functional when the Home or Guest **PLAYER** key has been pressed.

### **Delete Player**

The **<DELETE PLAYER>** key is only functional when the Home or Guest **<PLAYER>** key has been pressed.

### **Player**

**Note:** If player stats are being received from the Daktronics Scoring-Timing Interface (DSTI), the keys PLAYER, IND SUB, and MASS SUB will be disabled. The LCD will display the messages shown below when these keys are pressed. Refer to **ED-13650** for more information about DSTI.

Display	Action
STATS RECEIVED KEY DISABLED  EXIT STATS MODE Y/N?	The key disabled message will display for one second and then the <b><exit stats=""></exit></b> message will display and wait for a <b><yes></yes></b> or <b><no></no></b> key. If the <b><yes></yes></b> key is pressed, stats data will be saved in the console and the console will <b><exit stats=""></exit></b> mode until another stats packet is received. This will allow the operator to enter player stats from the console if the DSTI connection is lost.
HOME PLAYER NN*  NN = current setting	When the home or guest <b><player< b=""> •&gt; key is pressed, this prompt asks the jersey number of the player to be edited.  Enter the jersey number on the number pad and press <b><enter< b="">&gt;.</enter<></b></player<></b>
HOME PLAYER NN NOT FOUND, ADD?	If the player is not in the roster, this prompt asks if the player should be added.  Press <yes> to add the player to the roster.  Press <no> to decline the entry of the player number.</no></yes>
HOME PLAYER NN ROSTER FULL  NN = current setting	This message displays when the answer to the previous prompt is <b>YES</b> and the roster is full.

Display	Action
HOME PLAYER NN S-I A-XX* K-YY	If the player is found, the player's game status and statistics can be changed.
NN = player number	To change a player's game status:
S-I = in game S-O = out of game	Use the up and down arrow keys to select the player from the list.
VVhf	2. Press <in game=""> or <out game="" of="">.</out></in>
XX = number of aces YY = number of kills	3. The <b>S</b> field on the display changes to show the player's current status.
	To change a player's statistics:
HOME PLAYER NN S-I B-XX* D-YY	Use the up and down arrow keys to select the player from the list.
XX = number of <b>blocks</b> YY = number of <b>digs</b>	2. Use the left and right arrow keys to select the statistic to be changed. The display shifts to show all of the statistic fields.
	3. Enter the correct number for the selected statistic on the number pad and press <b><enter></enter></b> .
	Press <b><clear></clear></b> to exit the menu and return to the game.
HOME PLAYER NN DELETE PLAYER?  NN = current setting	To delete an incorrect player from the roster use the up and down arrow keys to select the player from the list and press <pre> <delete player="">.</delete></pre>
1414 - Garrett Setting	Press <b><yes></yes></b> to remove the player from the roster.
	Press <b><no></no></b> to decline the deletion process and return to the game.

# **Individual Substitution**

Display	Action
IND SUB- HOME NN* in for XX NN = sub player	When the home or guest <b><indiv. *="" sub.=""></indiv.></b> key is pressed, this prompt asks the jersey number of the player entering and leaving the game.
XX = in game player	Enter the jersey number of the player entering the game on the number pad and press <b><enter></enter></b> .
	Enter the jersey number of the player leaving the game on the number pad and press <b><enter></enter></b> .

Display	Action
IND SUB- HOME SUB OK	This message is displayed if no errors are found.
IND SUB- HOME SUB NOT MADE	This message is displayed for the following reasons:  The player going into the game is already marked as in.  The player coming out of the game is not marked as in.
NOT FOUND, ADD? NN* in for NN = current setting	This message is displayed if the player going in the game is not found in the roster.  Press <b>YES&gt;</b> to add the player to the roster.
	Otherwise, press <b><no></no></b> followed by <b><indiv. sub.="" •=""></indiv.></b> to try entering the sub again.
IND SUB- HOME NOT FOUND NN	This message is displayed if the player going out of the game is not found in the roster.
NN = current setting	Press <indiv. sub.="" •=""> to try entering the sub again.</indiv.>

## **Mass Substitution**

Display	Action
MASS SUB-HOME PLAYER 1 NN * NN = current setting	After the home or guest <b><mass b="" sub.<=""> •&gt; key is pressed, the LCD will display a message asking for the first of six player numbers that are going into the game. Enter the jersey number on the number pad and press <b><enter></enter></b> for each of the six players. Press <b><clear></clear></b> at any time to exit the Mass Substitution function.</mass></b>
MASS SUB-HOME SUB OK	This message is displayed if no errors are found.
MASS SUB-HOME DUPLICATE NN	This message displays for each duplicate jersey number found for the six players going into the game.
NN = current setting	Press <b><yes></yes></b> to correct the jersey number.
	Enter the correct jersey number and press <b><enter></enter></b> .

Display	Action
NOT FOUND, ADD? PLAYER 1 NN NN = current setting	This message displays for each player not found in the roster.  Press <b><yes></yes></b> to add the jersey number.  Press <b><no></no></b> to ignore and select another jersey number.
	Enter the correct jersey number and press <b><enter></enter></b> .

## **5.2** Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

### Match Number +1, Sets +1

The <MATCH NUMBER +1> and <SETS +1> keys are edited in the same ways. <SETS +1> is used as an example.

Display	Action
SET NO: EDIT	Press <b><edit></edit></b> followed by the appropriate statistic key to display the current setting.  Enter the correct number on the number pad and press
N = current setting	<enter>.</enter>

### **Time Out**

**Note:** Only the time outs configured in the EDIT SETTINGS function are displayed on the LCD and available for selection.

Display	Action
TIME OUTS-HOME FULL N*	Press <b><edit></edit></b> followed by <b><time out=""></time></b> for the home or guest team to display the current setting of full time outs remaining.
N = current setting	Enter the correct number of full time outs on the number pad and press <b><enter></enter></b> .
TIME OUTS-HOME PARTIAL N* N = current setting	After accepting or rejecting the number of full time outs, the number of partial time outs is displayed.  Enter the correct number of partial time outs on the number pad and press <b><enter></enter></b> .

# Score +1, -1

Display	Action
TEAM SCORE: EDIT HM CURR: NNN*  NNN = current setting	Press <b><edit></edit></b> and either of the <b>SCORE</b> keys for the home or guest team to display the current team score setting.  Enter the correct team score on the number pad and press <b><enter></enter></b> .

### Sets Won +1

Display	Action
SETS WON: EDIT HOME NN*  N = current setting	Press <b><edit></edit></b> followed by <b><sets +1="" won=""></sets></b> for the home or guest team to display the current setting of games won.  Enter the correct number of games won on the number pad and press <b><enter></enter></b> .

## Aces, Kills, Blocks, and Digs

The home and guest <ACES +1>, <KILLS +1>, <BLOCKS +1>, and <DIGS +1> keys are all edited in the same way. <ACES +1> is used as an example.

Display	Action
ACES: EDIT HOME NNN*	Press <b><edit></edit></b> followed by the appropriate statistic key to display the current setting.
NNN = current setting	Enter the correct number on the number pad and press <b><enter></enter></b> .

## Time Out On/Off

Display	Action
TIME OUTS-EDIT FULL MM:SS*	Press <b><edit></edit></b> followed by <b><time off="" on="" out=""></time></b> to display the current time setting for full time outs.
MM:SS = minutes, seconds	Enter the correct time on the number pad and press <pre><enter>.</enter></pre>

Display	Action
TIME OUTS-EDIT PARTIAL MM:SS*  MM:SS = minutes, seconds	After accepting or rejecting the full time outs time setting, the partial time outs time setting is displayed.  Enter the correct time on the number pad and press <enter>.</enter>

# 5.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

### **New Game**

Display	Action
MENU- MAIN NEW GAME?	Press <b><yes></yes></b> to clear all of the program data for the last game played or the game in progress and begin running the selected sport.
	Press <b><no></no></b> to resume the game in progress using the current data and exit the Menu.
	Press the down arrow key to scroll to the next selection.

### **New Code**

Display	Action
MENU- MAIN NEW CODE?	Press <yes> to enter a new code using the SELECT CODE prompt. Refer to Section 2.3 for more information on codes.</yes>
	Press <b><no></no></b> to resume the game in progress using the current data and exit the Menu.
	Press the down arrow key to scroll to the next selection.

# **Dimming Menu**

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN%	Press <0> through <9> or use the arrow keys to select the intensity for the digits on the scoreboard.
NN = current level	Press <b><no></no></b> to resume the game in progress using the current
NONE = bright <0>	data, and exit the Menu.
90% = <1>	
80% = <b>&lt;2&gt;</b>	Press the down arrow key to scroll to the next selection.
70% = <b>&lt;3&gt;</b>	
60% = <4>	
50% = <b>&lt;5&gt;</b>	
40% = <6>	
30% = <7>	
20% = <8>	
10% = <9>	

## **Home Roster, Guest Roster**

**Home Roster** and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
MENU- ROSTER SELECT HOME	Press <b><enter></enter></b> or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD.
	Press <b><clear></clear></b> to resume the game in progress using the current data and exit the Menu.
	Press the down arrow key to scroll to the next selection.
HOME- TEAM NAME EDIT SETTINGS?	Press <b><enter></enter></b> or the right or left arrow key to select the Team Name Edit Settings submenu.
	Press <b><clear></clear></b> to move on and edit the team name that will be displayed.
HOME- TEAM NAME SELECT WIDTH	Press <b><enter></enter></b> to select the width (in pixels) of the Team Name Message Centers (TNMC) used on the scoreboard.
HOME- TEAM NAME SIZE NN	Select from 16, 32, 48, or 64 and then press <b><enter></enter></b> .
NN = current setting	

Display	Action
Display	Action
HOME- TEAM NAME SELECT FONT	On the following screen, press <b><enter></enter></b> to select the display font of the team name.
HOME- TEAM NAME 8H SINGLE	Select one of the following font types:  • 8H SINGLE (single stroke)  • 8H BOLD (double stroke)  • 8H NARROW (single stroke, alternate narrow)  • 8H NARROW BOLD (double stroke, alternate narrow)
	After selecting a font type, press <b><enter></enter></b> .
	Refer to <b>Section 2.8</b> for more information on TNMC width and font selection.
	Press <b><no></no></b> to move on and edit the team name that will be displayed.
HOME- TEAM NAME _OME *	The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.
	The TNMC is updated after each selection is completed.
	Use the COLUMNS, ROWS and STROKE keys to select the WIDTH, HEIGHT and FONT of the TNMC. Refer to Section 2.8 for more information about team name entry.
	Enter up to fifteen (15) characters for the team name and press <b><enter></enter></b> .
	Reinsert the VOLLEYBALL (LL-2434) insert to continue.
HOME- TEAM ABBR EDIT SETTINGS?	Press <b><enter></enter></b> or the right or left arrow key to select the Team Abbreviation Edit Settings submenu.
	Press <b><clear></clear></b> to move on and edit the team abbreviation that will be displayed.
HOME- TEAM ABBR SELECT WIDTH	Press <b><enter></enter></b> to select the width (in pixels) of the Team Name Message Centers (TNMC) used on the scoreboard.
HOME- TEAM ABBR SIZE NN	Select from 16, 32, 48, or 64 and then press <b><enter></enter></b> .
NN = current setting	

Display	Action
HOME- TEAM ABBR SELECT FONT  HOME- TEAM ABBR 8H SINGLE	On the following screen, press <b><enter></enter></b> to select the display font of the team name.  Select one of the following font types:  • 8H SINGLE (single stroke)  • 8H BOLD (double stroke)  • 8H NARROW (single stroke, alternate narrow)  • 8H NARROW BOLD (double stroke, alternate narrow)  After selecting a font type, press <b><enter></enter></b> .  Refer to <b>Section 2.8</b> for more information on TNMC width and font selection.  Press <b><clear></clear></b> to move on and edit the team abbreviation that will be displayed.
HOME- TEAM ABBR _OME *	The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.  The TNMC is updated after each selection is completed.  Use the COLUMNS, ROWS and STROKE keys to select the WIDTH, HEIGHT and FONT of the TNMC. Refer to Section 2.8 for more information about team name entry.  Enter up to ten (10) characters for the team abbreviation and press <enter>.  Reinsert the VOLLEYBALL (LL-2434) insert to continue.</enter>
MENU- HOME EDIT PLAYERS?	Press <b><yes></yes></b> to assign the jersey numbers for all the players in the roster.  Press <b><no></no></b> or the left arrow key to exit the submenu and return to the Main menu.
MENU- HOME PLAYER Ø1 NN*  NN = current setting	Once Edit Players is selected, enter the jersey number for that player from the official roster and press <b><enter></enter></b> . The next player is shown on the LCD. Continue entering the jersey numbers for up to 15 players.  Press <b><clear></clear></b> to advance to the next option.

Display	Action
MENU- HOME CLEAR STATS?	This function clears all game statistics and should only be used before the start of a game.
	Press <b><yes></yes></b> to clear the in-game status fouls, and points for all players in the home roster.
	Press <no> to decline the selection.</no>

## **Display Menu**

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, update the scoreboard drivers, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press <b><yes></yes></b> to select the Display submenu and show the first prompt on the LCD.  Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN SEGMENT TIMER?	<b>Note:</b> The segment timer function is disabled while the clock is running.
	Press <b><yes></yes></b> to exit the sport code and run the segment timer program.
	Press <b><no></no></b> or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	This prompt confirms that the user wants to exit the sport code and enter the segment timer.
	Note: The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings.
	Refer to <b>Section 3</b> for more information on the segment timer.
MENU- DISPLAY	Press <b><yes></yes></b> to select the blank scoreboard feature.
BLANK SCBD?	The scoreboard will go blank and wait for the operator to press any key to resume normal operation.
PRESS ANY KEY TO RETURN TO GAME	Press the down arrow key to scroll to the next selection.

Display	Action
MENU-DISPLAY RUN DOWNLOAD Y/N?	This menu function allows for the downloading of the driver program to update the driver software.  This is used along with DakLoader software running on a computer connected to the J5 port on the AS-5500. For downloading instructions, refer to ED-18728 in <b>Appendix D</b> .
MENU-DISPLAY SYNC TO CHAN  SYNC TO CHAN ON 1-ON, 2-OFF	Press <yes> to view or set the radio sync to channel setting.  The LCD will show if the setting is ON or OFF. Press &lt;1&gt; to turn it on, or press &lt;2&gt; to turn it off.  Note: This setting should remain ON unless instructed by Daktronics to turn it off.</yes>
MENU- DISPLAY CLOCK CAPTIONS  CLOCK CAPTION- 1-ON, 2-OFF ON	Press <b><yes></yes></b> to view or set the clock caption setting.  The LCD will show if the setting is ON or OFF. Press <b>&lt;1&gt;</b> to turn it on, or press <b>&lt;2&gt;</b> to turn it off.  Press the down arrow key to scroll to the next selection.
MENU- DISPLAY SET RTD OFFSET  RTD OFFSET ØK Ø 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament).  Press <yes> to set the RTD offset.  Press &lt;1&gt; to offset the RTD by 5000, &lt;2&gt; to offset by 10000, or &lt;3&gt; to offset by 15000. Press &lt;0&gt; to clear the offset.</yes>

# **Edit Settings**

Display	Action
MENU- MAIN EDIT SETTINGS?	Press <b><yes></yes></b> or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD.  Refer to <b>Section 5.4</b> .
	Press <b><no></no></b> to resume the game in progress using the current data and exit the Menu.  Press the down arrow key to scroll to the next selection.

## **Color Menu**

The Color Menu allows the user to select the settings for color control of the clock and the score digits.

Display	Action
MENU- MAIN ENTER COLOR MENU	Press <b><yes></yes></b> to select the color sub menu and show the menu on the LCD.
	Press the down arrow key to scroll to the next selection.
COLOR MENU CLOCK COLOR	Press <b><yes></yes></b> to select the clock color selection.
	Press the down arrow key to scroll to the next selection
CLOCK COLOR -ON 1-ON, 2-OFF	The current setting for clock color control will be shown as <b>ON</b> or <b>OFF</b> . Press <b>&lt;1&gt;</b> to set <b>ON</b> or <b>&lt;2&gt;</b> to set <b>OFF</b> .
ALERT TIME MM:55*  MM:SS = minutes, seconds	If set <b>ON</b> , the clock color will be green for RUN and red for STOP. The operator can set an alert time when the clock will go amber. Set the alert time to 0:00 if none is used.
CLOCK DEFAULT COLOR =GRN	If the clock color control is set OFF, the operator can select a default color for the clock. Press the up or down arrow key to select a color.
COLOR MENU SCORE COLOR	Press <b><yes></yes></b> to select the score color selection.  Press the down arrow key to scroll to the next selection.
SCORE COLOR -ON 1-ON, 2-OFF	The current setting for score color control will be shown as <b>ON</b> or <b>OFF</b> . Press <1> to set <b>ON</b> or <2> to set <b>OFF</b> .
HIGH SCORE COLOR =GRN  LOW SCORE COLOR =RED  TIE SCORE COLOR =AMB	If set to <b>ON</b> , the color of the score can be selected for the larger, smaller, and tied score.  Press the up or down arrow key to select a color.  Press <b><enter></enter></b> when the desired color is shown.
COLOR PHID	

Display	Action
HOME SCORE COLOR =GRN	If set to <b>OFF</b> , the default color for <b>HOME</b> and <b>GUEST</b> scores can be selected.
GUEST SCORE COLOR =RED	Press the up and down arrow key to select a color.  Press <b><enter></enter></b> when the desired color is shown.

# Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press <b><yes></yes></b> or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD.  Press <b><no></no></b> to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press <1> or <2> to display the time of day in 12 hour (default) or 24 hour format.  Press <enter> or the down arrow key to scroll to the next selection.</enter>
MENU-TIME OF DAY TOD HH: MM: SS*  HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press <b><enter></enter></b> .  Press <b><enter></enter></b> or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD	Press <1> or <2> to display the game clock (default) or the time of day clock on the scoreboard.  Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed.  Press <b><enter></enter></b> to blank all game data on the scoreboard except for the Time of Day digits.

# 5.4 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

#### **Main Clock**

**Note 1:** The settings for the Main Clock are used with the **SET MAIN CLOCK>** key.

**Note 2:** The period and break lengths are used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action		
MAIN CLOCK-MODE TENTH SECOND? Y	When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute.  Press <yes> to set the main clock to display tenths of a second.  Press <no> to display whole seconds.</no></yes>		
MAIN CLOCK-TIME PERIOD MM:SS*  MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press <b><enter></enter></b> .  For example, 60:00 per game  Note: Pressing <b><enter></enter></b> to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.		
MAIN CLOCK-TIME BREAK MM:SS*  MM:SS = minutes, seconds	Set the amount of time between periods.  Enter the correct amount of time for break length in minutes and seconds on the number pad and press <b><enter></enter></b> .  For example, 3:00		

### **Time Outs**

**Note 1:** If a full or partial time out is not needed for the HOME or GUEST **<TIME OUT>** keys, enter zero for the number of time outs.

Note 2 If a full or partial time out is not needed for <TIME OUT ON/OFF>, enter zero for the time.

Display	Action			
TIME OUTS- MODE FULL N * N = current setting	Enter the number of full time outs on the number pad and press <b><enter></enter></b> .			
TIME OUTS- TIME FULL MM: SS*  MM:SS = minutes, seconds	Enter the amount of time for a full time out in minutes and seconds on the number pad and press <b><enter></enter></b> .  For example, 0:30			
TIME OUTS- MODE WARNING MM:SS*  MM:SS = minutes, seconds	A warning horn can be configured to signal the end of a full time out. While the time out clock is counting down, the horn will sound for one second when the warning time is reached. Enter a zero for the time to disable the warning horn.  Enter the time in minutes and seconds on the number pad and press <b><enter></enter></b> .			
TIME OUTS- MODE PARTIAL N * N = current setting	Enter the number of partial time outs on the number pad and press <b><enter></enter></b> .			
TIME OUTS- TIME PARTIAL MM:SS*  MM:SS = minutes, seconds	Enter the amount of time for a partial time out in minutes and seconds on the number pad and press <b><enter></enter></b> .  For example, 00:20			
TIME OUTS-MODE SHOW ON MAIN? N	Press <b><yes></yes></b> to display the time out time on the LCD and the main clock digits of the scoreboard while the time out clock is active.			
	Press <b><no></no></b> to display the time out time on the LCD only.			

#### **Team Stats**

Display	Action	
TEAM STATS-MODE UPDATE PLAYER? Y	This feature must be enabled for statistic displays.  Press <yes> to allow entry of a player number after the home or guest team aces, kills, blocks or digs are incremented or decremented.  Press <no> to prevent entry of a player number.</no></yes>	

#### User Def 1 & User Def 2

**User Def 1** and **User Def 2** are used to define which statistics (aces, kills, blocks or digs) are displayed on the scoreboard. Only two of the four statistics can be selected to display on the statistics displays for the individual players in the game.

- **User Def 1** displays the statistics in the Foul digits.
- **User Def 2** displays the statistics in the Points digits.

User Def 1 and User Def 2 are entered in the same way. User Def 1 is used as an example.

Display	Action
USER DEF 1=N 1-ACES  USER DEF 1=N 2-KILLS  USER DEF 1=N 3-BLOCKS	<ul> <li>Press &lt;1&gt; or use the left and right arrow keys to scroll to ACES.</li> <li>Press &lt;2&gt; or use the left and right arrow keys to scroll to KILLS.</li> <li>Press &lt;3&gt; or use the left and right arrow keys to scroll to BLOCKS.</li> <li>Press &lt;4&gt; or use the left and right arrow keys to scroll to DIGS.</li> </ul> Press <yes> to display the selected stat on the scoreboard.</yes>
USER DEF 1=N 4-DIGS  N = current setting	Press < NO> to decline the selection and return to the game.  Press the down arrow key to scroll to the next selection.

# **Select Captions**

Display	Action		
SELECT CAPTIONS ON 1←→ 2 OFF	This menu option allows for the controlled backlit captions to be turned ON/OFF.  Press the <1> key to select ON and OFF for captions controlled by control #1.  Press the <2> key to select ON and OFF for captions controlled by control #2.		

# **Shot Horn Control**

Display	Action			
SHOT HRN CONTROL SET= SHOT HORN	This menu option allows the selection of what will control the output for the shot clock horn. Use the left or right arrow keys to scroll to the desired setting or use the number keys (0-3) as short cuts.			
	Press <b><enter></enter></b> when the desired setting is shown.			
	0= NO CONTROL 1= MAIN HORN 2= SHOT HORN 3= MAIN & SHOT			

# **Light Control**

Display	Action		
LIGHT CONTROL SET= CLK=0	This menu option allows the selection of what will control the output for the light strip displays. Use the left or right arrow keys to scroll to the desired setting or use the number keys (1-6) as short cuts.  Press <b><enter></enter></b> when the desired setting is shown.		
	1= CLK=0 3= (not used) 5= CLK=0 & HRN	2= CLK STOP 4= MAIN HORN 6= STOP & HRN	

#### **Switch Output**

The All Sport<sup>®</sup> 5500 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK=0.

To display the desired switch setting:

- 1. Press the number (0, 1, 2, 3) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.
- **2.** Press **YES>** to select the new setting.
- **3.** Press **NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result		
SWITCH OUTPUT=N Ø-DISABLED?  N = current setting	The switch remains open at all times and any external devices are disabled.		
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered.  In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.		
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.		
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when <b><horn></horn></b> is pressed.		

# **Default Settings**

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Tenth of a Second	No			
Period Length	60:00			
Break Length	3:00			
Full Time Outs	2			
Full Time Out	0:30			
Time Out Warning	0:00			
Partial Time Outs	0			
Partial Time Out	0:00			
User Def 1	Aces			
User Def 2	Kills			
Update Player	No			
Select Captions	1-ON			
Shot Horn Control	Main Horn			
Light Control	Clk=0			
Switch Output	1-Clock = 0			

# **Section 6: Wrestling Operations**

Sport Insert: LL-2435

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**.

#### **Reference Drawings:**

Block Diagram: AS5000 BB- VB and WR #1	Drawing A-124686
Block Diagram: AS5000 BB- VB and WR #3	Drawing A-124688
Insert; LL-2435 A/S 5000, Wrestling	Drawing A-124701
Insert; LL-2441 A/S 5000, Team Name	Drawing A-125290
Block Diagram- A/S 3000 or 5000 BB- VB and WR #2	Drawing A-125415

Refer to the information in Section 2 to start up the console and use the sport insert.

If an insert is lost or damaged, a copy of the insert drawing can be used until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the model number of a scoreboard is unknown, refer to the documentation provided with the scoreboard.

# 6.1 Wrestling Keys

#### Match Number +1

Display	Action
MATCH-+1 NNN NNN = current setting	Press <b><match +1=""></match></b> to increment the match number.  A prompt showing match number displays briefly.
WEIGHT CLASS 01 NNN NNN = weight class	If weight classes are selected, a prompt to select a weight class will be shown on the LCD. Use the arrow keys to select a weight class and press <b><enter></enter></b> . The weight class displays in the Match digits.

### Period +1

Display	Action
PERIOD- +1 N N = current setting	Press <period +1=""> to increment the quarter number.  A prompt showing period number displays briefly.  The period time will be set to the configured period time if the current time is at zero. There are 5 configured period times and the time will be set based on the current period number. If the current time was set before the <period +1=""> key is pressed, the time will not be adjusted.</period></period>

# **Set Main Clock (Period Times)**

Display	Action
MAIN CLOCK -SET CURR MM:SS*	After the main clock has been stopped, press <b><set b="" main<=""> <b>CLOCK&gt;</b> to display the current time of the main clock.</set></b>
MM:SS = minutes, seconds	To change the time, enter the desired time on the number pad and press <b><enter></enter></b> .
	Press <b><clear></clear></b> twice to clear changes and return to the game.
MAIN CLOCK -EDIT PERIOD MM:SS*	Press <b><set clock="" main=""></set></b> a second, third, fourth, fifth or sixth time or the down arrow key to display the configured time for each clock period length.
MAIN CLOCK -EDIT PER 2 MM:SS*	To accept the displayed period length press <b><yes></yes></b> .  To decline the selection of the period length press <b><no></no></b> .
MAIN CLOCK -EDIT PER 3 MM:SS*	To change the period length and set the main clock enter the new time in minutes and seconds on the number pad and press <b><enter></enter></b> .
MAIN CLOCK -EDIT PER 4 MM:SS*	Press <b><clear></clear></b> twice to clear changes and return to the game.
MAIN CLOCK -EDIT PER 5 MM:SS* MM:SS = minutes, seconds	

# Home Advantage, Guest Advantage, Stop Advantage Clock

Display	Action
TIME M: SS + AD TM M: SS.T >G  M:SS = minutes, seconds (main clock)  M:SS.T = minutes, seconds, tenths of a second (advantage timer)  G or H = guest or home	The main clock must be running to use the advantage timer.  Press the <home (green)="" advantage=""> or <guest (red)="" advantage=""> key to start the advantage timer for the competitor that has control of the match. The competitor that has the net (most) advantage time is shown on the LCD display (<h or="">G). The timer (AD TM on the display) counts up or down depending on which competitor is in control (last advantage key pressed) and which competitor has the net (most) advantage time.  For example:</h></guest></home>
	If the home competitor is the first to control the match, press <home (green)="" advantage="">. The display shows <h (ad="" and="" counts="" td="" the="" timer="" tm)="" up.<=""></h></home>
	When the guest competitor gains control, press <b><guest< b=""> (RED) ADVANTAGE&gt;. The display continues to show <h (ad="" (because="" <b="" advantage)="" but="" continues="" count="" counts="" down="" down.="" has="" home="" net="" still="" the="" timer="" tm)="" to="" until=""><home (green)="" advantage=""></home></h></guest<></b> is pressed again or the timer reaches zero.
	If zero is reached, the display shows >G (which now has the net advantage) and the timer counts up.
	Press the <b><stop advantage="" clock=""></stop></b> key to stop the advantage timer when neither competitor is in control.

# Team Score +1, -1

Display	Action
TEAM SCORE- +1 HOME NNN NNN = current setting	Press <b><score< b=""> <b>+1&gt;</b> or <b><score< b=""> <b>-1&gt;</b> to increment or decrement the home or guest team score.  A prompt showing total score will display briefly.  Pressing a <b><team score=""></team></b> key will cause the team scores to show up on the LCD (TM will show on the LCD to indicate this). Pressing a <b><match score=""></match></b> key will cause the match scores to show on the LCD (MAT will show up on the LCD to indicate this).</score<></b></score<></b>

### Match Score +1, +2, +3, -1

The home and guest <MATCH SCORE +1>, <MATCH SCORE +2>, and <MATCH SCORE +3> keys are used to increment the team score and the <MATCH SCORE -1> key is used to decrement the team score.

Display	Action
MATCH SCORE- +1 HOME NN NN = current setting	Press the appropriate score key to increment or decrement the score for the home or guest team.  The LCD shows which key was pressed and the new value for the team score of the corresponding team.  Pressing a <match score=""> key will cause the match scores to show on the LCD (MAT will show up on the LCD to indicate this). Pressing a <team score=""> key will cause the team scores to show up on the LCD (TM will show on the LCD to indicate this).</team></match>

# **Start/Stop Injury Time**

Display	Action
H INJURY M:SS AD TM M:SS.T H<  M:SS = minutes, seconds	The maximum allowed injury time is set for each competitor at the beginning of a match and reset to this time when the Reset Match function is performed.
(injury timer)  M:SS.T = minutes, seconds,	When enabled, the injury times are displayed in the main clock digits and the corresponding (home or guest) match score digits flash.
tenths of a second (advantage timer)	The main clock must be stopped to use the injury timer.
G or H = guest or home	Press <b><start injury="" time=""></start></b> to start the injury timer for the home or guest competitor. The injury timer counts down from the maximum allowed time until <b><stop injury="" time=""></stop></b> is pressed or 0:00 is reached. The injury time is shown on the LCD display with H for home or G for guest.
	Press the <b><stop injury="" time=""></stop></b> key to stop the injury timer and return the period time to the main clock digits. A key press is required before the main clock digits return to period time. This gives the coach time to see how much injury time remains.

### **Reset Match**

Display	Action
RESET MATCH? Y/N	Press <yes> to clear all of the data for the last match or the match in progress and begin a new individual match.  Press <no> to resume the match in progress using the current data and exit the Menu.</no></yes>
SELECT WIN HOME *	If weight classes are selected, it will ask for the winner. Use the arrow keys to select HOME or GUEST, and press <enter>.</enter>
TOD HH: MM: SS ET M: SS H N G X  HH:MM:SS = hours, minutes, seconds (Time of day)  M:SS = minutes, seconds (elapsed time)  N = home score X = guest score	Enter the points for the win, and press <b><enter></enter></b> .  The console will display the time of day, elapsed time of match, and points scored in the match. This will display until a key is pressed.

# Start/Stop Blood Time

Display	Action
G BLOOD M:SS AD TM M:SS.T >G	The maximum allowed blood time is set for each competitor at the beginning of a match and reset to this time when the Reset Match function is performed.
M:SS = minutes, seconds (blood timer)  M:SS.T = minutes, seconds,	When enabled, the blood times are displayed in the main clock digits and the corresponding (home or guest) match score digits flash.
tenths of a second (advantage timer)	The main clock must be stopped to use the blood timer.
G or H = guest or home	Press <b><start blood="" time=""></start></b> to start the blood timer for the home or guest competitor. The injury/blood timer counts down from the maximum allowed time until <b><stop blood="" time=""></stop></b> is pressed or 0:00 is reached. The blood time is shown on the LCD display with H for home or G for guest.
	Press the <b><stop blood="" time=""></stop></b> key to stop the blood timer and return the period time to the main clock digits.
	A key press is required before the main clock digits return to period time. This gives the coach time to see how much blood time remains.

# **Start/Stop Recovery Time**

Display	Action
RECOVERY M:SS AD TM M:SS.T >G	The recovery time is set to the configured recovery time for each competitor when the <b><start home="" recovery=""></start></b> or <b><start guest="" recovery=""></start></b> keys are pressed.
M:SS = minutes, seconds (recovery timer)	When enabled, the recovery times are displayed in the main clock digits and the corresponding (home or guest) match score digits flash.
M:SS.T = minutes, seconds,	
tenths of s second (advantage timer)	The main clock must be stopped to use the recovery timer.
G or H = guest or home	After pressing a start recovery key for the home or guest competitor, the recovery timer counts down from the maximum allowed time until <b><stop recovery="" time=""></stop></b> is pressed or 0:00 is reached.
	Press <b><stop recovery="" time=""></stop></b> to stop the recovery timer
	and return the period time to the main clock digits.

### **6.2** Edit

The **<EDIT>** key allows the user to select and edit the following scoreboard fields. Press **<EDIT>** and the key for the field to be edited.

### **Home Advantage**

Display	Action
AD TM HOME MM:SS.T*	Press <b><edit></edit></b> followed by <b><home (green)="" advantage=""></home></b> to display the current advantage time for the home competitor.
MM:SS.T = minutes, seconds, tenths of a second	Enter the advantage time for the home competitor on the number pad and press <b><enter></enter></b> .
	Press <b><clear></clear></b> twice to clear changes and return to game.

# **Guest Advantage**

Display	Action
	Press <b><edit></edit></b> followed by <b><guest (red)="" advantage=""></guest></b> to
AD TM GUEST MM:SS.T*	display the current advantage time for the guest competitor.  Enter the advantage time for the guest competitor on the
MM:SS.T = minutes, seconds, tenths of a second	number pad and press <b><enter></enter></b> .
	Press < CLEAR > twice to clear changes and return to game.

#### **Blood Time**

Display	Action
BLOOD TIME HOME MM:SS*	Press <b><edit></edit></b> followed by either <b>BLOOD TIME</b> key for the home or guest team to display the current blood time setting.
MM:SS = current setting	Enter the maximum allowed blood time in minutes and seconds on the number pad and press the <b><enter></enter></b> key.
	For example, 5:00.

### **Injury Time**

Display	Action
INJURY TIME HOME MM:SS*	Press <b><edit></edit></b> followed by either <b>INJURY TIME</b> key for the home or guest team to display the current injury time setting.
MM:SS = current setting	Enter the maximum allowed injury time in minutes and seconds on the number pad and press the <b><enter></enter></b> key.
	For example, 5:00.

#### Match Number, Period, Team Score and Match Score

The home and guest <MATCH NUMBER +1>, <PERIOD +1>, <TEAM SCORE+1, -1> and <MATCH SCORE +1, +2, +3, -1> keys are all edited in the same way. <TEAM SCORE +1> is used as an example.

Display	Action
TEAM SCORE- EDIT HOME NNN	Press <b><edit></edit></b> and the appropriate statistic key to display the current setting. For example, <b><team +1,="" -1="" score=""></team></b> .
NNN = current setting	Enter the correct number on the number pad and press <b><enter></enter></b> .

#### 6.3 Menu

The **<MENU>** key allows the user to select from a list of options specific for each sport. The up and down arrow keys scroll through the menu list. Pressing a key other than **<YES>**, **<NO>**, the arrow keys, and other allowed keys, exits the Menu function.

Use the **MENU** function at the start of each new game to edit the Home and Guest Rosters.

#### **New Game**

Display	Action
MENU- MAIN NEW GAME?	Press <b><yes></yes></b> to clear all of the program data for the last game played or the game in progress and begin running the selected sport.
	Press <b><no></no></b> to resume the game in progress using the current data and exit the Menu.
	Press the down arrow key to scroll to the next selection.

#### **New Code**

Display	Action
MENU- MAIN NEW CODE?	Press <yes> to enter a new code using the SELECT CODE prompt. Refer to Section 2.3 for more information on codes.</yes>
	Press <b><no></no></b> to resume the game in progress using the current data and exit the Menu.
	Press the down arrow key to scroll to the next selection.

# **Dimming Menu**

The **Dimming Menu** allows the user to change the brightness of the scoreboard.

Display	Action
MENU- DIMMING LEVEL (0-9): NN%	Press <0> through <9> or use the arrow keys to select the intensity for the digits on the scoreboard.
NN = current level NONE = bright <0>	Press <b><no></no></b> to resume the game in progress using the current data, and exit the Menu.
90% = <1> 80% = <2> 70% = <3>	Press the down arrow key to scroll to the next selection.
60% = <4> 50% = <5> 40% = <6>	
30% = < <b>7&gt;</b> 20% = < <b>8&gt;</b>	
10% = <9>	

# **Home Roster, Guest Roster**

**Home Roster** and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

Display	Action
MENU- ROSTER SELECT HOME	Press <b><enter></enter></b> or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD.  Press <b><clear></clear></b> to resume the game in progress using the current data and exit the Menu.  Press the down arrow key to scroll to the next selection.
HOME- TEAM NAME EDIT SETTINGS?	Press <b><enter></enter></b> or the right or left arrow key to select the Team Name Edit Settings submenu.  Press <b><clear></clear></b> to move on and edit the team name that will be displayed.
HOME- TEAM NAME SELECT WIDTH  HOME- TEAM NAME SIZE NN  NN = current setting	Press <b><enter></enter></b> to select the width (in pixels) of the Team Name Message Centers (TNMC) used on the scoreboard.  Select from 16, 32, 48, or 64 and then press <b><enter></enter></b> .
HOME- TEAM NAME SELECT FONT  HOME- TEAM NAME 8H SINGLE	On the following screen, press <b><enter></enter></b> to select the display font of the team name.  Select one of the following font types:  • 8H SINGLE (single stroke)  • 8H BOLD (double stroke)  • 8H NARROW (single stroke, alternate narrow)  • 8H NARROW BOLD (double stroke, alternate narrow)  After selecting a font type, press <b><enter></enter></b> .  Refer to <b>Section 2.8</b> for more information on TNMC width and font selection.  Press <b><no></no></b> to move on and edit the team name that will be displayed.

Display	Action
HOME- TEAM NAME _OME *	The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.  The TNMC is updated after each selection is completed.  Use the COLUMNS, ROWS and STROKE keys to select the WIDTH, HEIGHT and FONT of the TNMC. Refer to Section 2.8 for more information about team name entry.  Enter up to fifteen (15) characters for the team name and press <enter>.  Reinsert the WRESTLING (LL-2435) insert to continue.</enter>
	The state of the s
HOME- TEAM ABBR EDIT SETTINGS?	Press <b><enter></enter></b> or the right or left arrow key to select the Team Abbreviation Edit Settings submenu.
	Press <b><clear></clear></b> to move on and edit the team abbreviation that will be displayed.
HOME- TEAM ABBR SELECT WIDTH  HOME- TEAM ABBR SIZE NN  NN = current setting	Press <b><enter></enter></b> to select the width (in pixels) of the Team Name Message Centers (TNMC) used on the scoreboard.  Select from 16, 32, 48, or 64 and then press <b><enter></enter></b> .
HOME- TEAM ABBR SELECT FONT  HOME- TEAM ABBR 8H SINGLE	On the following screen, press <b><enter></enter></b> to select the display font of the team name.  Select one of the following font types:  • 8H SINGLE (single stroke)  • 8H BOLD (double stroke)  • 8H NARROW (single stroke, alternate narrow)  • 8H NARROW BOLD (double stroke, alternate narrow)
	After selecting a font type, press <b><enter></enter></b> .  Refer to <b>Section 2.8</b> for more information on TNMC width and font selection.  Press <b><clear></clear></b> to move on and edit the team abbreviation that will be displayed.

Display	Action
HOME- TEAM ABBR _OME *	The TEAM NAME (LL-2441) insert must be used to enter the Team Name Message Center (TNMC) settings.
	The TNMC is updated after each selection is completed.
	Use the COLUMNS, ROWS and STROKE keys to select the WIDTH, HEIGHT and FONT of the TNMC. Refer to Section 2.8 for more information about team name entry.
	Enter up to ten (10) characters for the team abbreviation and press <b><enter></enter></b> .
	Reinsert the WRESTLING (LL-2435) insert to continue.

# **Weight Class**

The WEIGHT CLASS MENU allows the user to enter the weight class values.

Display	Action
MENU- MAIN ENTER WEIGHT CLASS	Press <b><yes></yes></b> to select the Display submenu and show the first prompt on the LCD.  Press the down arrow key to scroll to the next selection.
WEIGHT CLASS 01*NNN WIN	A total of 14 weight classes may be entered. Use the up and down arrow keys to select the index of the weight class to edit, and press <b><enter></enter></b> .
WEIGHT CLASS 01 NNN* WIN	Enter a new value for the weight class and press <b><enter></enter></b> .
WEIGHT CLASS 01 NNN WIN*HX	Set the winner of this weight class. This is used mainly for editing a winner that was set to the wrong side. Use the arrow keys to select H or G as the winner and press <b><enter></enter></b> .
WEIGHT CLASS 01 NNN WIN HX*	Enter the score for the winner and press <b><enter></enter></b> .
NNN = current weight setting G or H = guest or home X = current games won	Press <b><clear></clear></b> or <b><menu></menu></b> to exit from the weight class settings.

# **Display Menu**

The **Display Menu** allows the user to start and edit the segment timer, blank the scoreboard, update the scoreboard drivers, enable/disable the clock captions, and more.

Display	Action
MENU- MAIN ENTER DISPLAY MENU?	Press <b><yes></yes></b> to select the Display submenu and show the first prompt on the LCD.
	Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN SEGMENT TIMER?	<b>Note:</b> The segment timer function is disabled while the clock is running.
	Press <b><yes></yes></b> to exit the sport code and run the segment timer program.
	Press <b><no></no></b> or the down arrow key to scroll to the next selection.
EXIT GAME ARE YOU SURE?	This prompt confirms that the user wants to exit the sport code and enter the segment timer.
	<b>Note:</b> The SEGMENT TIMER (LL-2475) insert must be inserted to enter the Segment Timer settings.
	Refer to <b>Section 3</b> for more information on the segment timer.
MENU- DISPLAY	Press <b><yes></yes></b> to select the blank scoreboard feature.
BLANK SCBD?	The scoreboard will go blank and wait for the operator to press any key to resume normal operation.
PRESS ANY KEY TO RETURN TO GAME	Press the down arrow key to scroll to the next selection.
MENU-DISPLAY RUN DOWNLOAD Y/N?	This menu function allows for the downloading of the driver program to update the driver software.
	This is used along with DakLoader software running on a computer connected to the J5 port on the AS-5500. For downloading instructions, refer to ED-18728 in <b>Appendix D</b> .

Display	Action
MENU-DISPLAY SYNC TO CHAN  SYNC TO CHAN ON 1-ON, 2-OFF	Press <yes> to view or set the radio sync to channel setting.  The LCD will show if the setting is ON or OFF. Press &lt;1&gt; to turn it on, or press &lt;2&gt; to turn it off.  Note: This setting should remain ON unless instructed by Daktronics to turn it off.</yes>
MENU- DISPLAY CLOCK CAPTIONS  CLOCK CAPTION- 1-ON, 2-OFF ON	Press <b><yes></yes></b> to view or set the clock caption setting.  The LCD will show if the setting is ON or OFF. Press <b>&lt;1&gt;</b> to turn it on, or press <b>&lt;2&gt;</b> to turn it off.  Press the down arrow key to scroll to the next selection.
MENU- DISPLAY SET RTD OFFSET  RTD OFFSET ØK Ø 1=5 2=10 3=15	The RTD offset is typically used when there are multiple consoles in the same area, and one or more matrix displays showing their information (for example, during a tournament).  Press <yes> to set the RTD offset.  Press &lt;1&gt; to offset the RTD by 5000, &lt;2&gt; to offset by 10000, or &lt;3&gt; to offset by 15000. Press &lt;0&gt; to clear the offset.</yes>

# **Edit Settings**

Display	Action
MENU- MAIN EDIT SETTINGS?	Press <yes> or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD.  Refer to Section 6.4.  Press <no> to resume the game in progress using the current data and exit the Menu.  Press the down arrow key to scroll to the next selection.</no></yes>

### **Color Menu**

The Color Menu allows the user to select the settings for color control of the clock and the score digits.

Display	Action
MENU- MAIN ENTER COLOR MENU	Press <b><yes></yes></b> to select the color sub menu and show the menu on the LCD.  Press the down arrow key to scroll to the next selection.
COLOR MENU CLOCK COLOR CLOCK COLOR -ON 1-ON, 2-OFF	Press <yes> to select the clock color selection.  Press the down arrow key to scroll to the next selection  The current setting for clock color control will be shown as ON or OFF. Press &lt;1&gt; to set ON or &lt;2&gt; to set OFF.</yes>
ALERT TIME MM:SS*  MM:SS = minutes, seconds  CLOCK DEFAULT COLOR =GRN	If set <b>ON</b> , the clock color will be green for RUN and red for STOP. The operator can set an alert time when the clock will go amber. Set the alert time to 0:00 if none is used.  If the clock color control is set OFF, the operator can select a default color for the clock. Press the up or down arrow key to select a color.
COLOR MENU SCORE COLOR SCORE COLOR -ON 1-ON, 2-OFF	Press <yes> to select the score color selection.  Press the down arrow key to scroll to the next selection.  The current setting for score color control will be shown as ON or OFF. Press &lt;1&gt; to set ON or &lt;2&gt; to set OFF.</yes>
HIGH SCORE COLOR =GRN  LOW SCORE COLOR =RED  TIE SCORE COLOR =AMB	If set to <b>ON</b> , the color of the score can be selected for the larger, smaller, and tied score.  Press the up or down arrow key to select a color.  Press <b><enter></enter></b> when the desired color is shown.

Display	Action
HOME SCORE COLOR =GRN	If set to <b>OFF</b> , the default color for <b>HOME</b> and <b>GUEST</b> scores can be selected.
GUEST SCORE COLOR =RED	Press the up and down arrow key to select a color.  Press <b><enter></enter></b> when the desired color is shown.

# Time of Day

Display	Action
MENU- MAIN SELECT TOD?	Press <b><yes></yes></b> or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD.  Press <b><no></no></b> to resume the game in progress using the current data and exit the menu.
MENU-TIME OF DAY 1*12, 2-24 HOUR	Press <1> or <2> to display the time of day in 12 hour (default) or 24 hour format.  Press <enter> or the down arrow key to scroll to the next selection.</enter>
MENU-TIME OF DAY TOD HH: MM: 55*  HH:MM:SS = hours, minutes, seconds	Enter the time of day in hours, minutes and seconds using the selected format on the number pad and press <b><enter></enter></b> .  Press <b><enter></enter></b> or the down arrow key to scroll to the next selection.
MENU-TIME OF DAY 1*GAME 2-TOD	Press <1> or <2> to display the game clock (default) or the time of day clock on the scoreboard.  Press the down arrow key to exit the Menu and return to the game.
MENU-TIME OF DAY BLANK GAME DATA?	If 2-TOD is selected this message will be displayed.  Press <b><enter></enter></b> to blank all game data on the scoreboard except for the Time of Day digits.

# 6.4 Settings

The user can edit the following settings by selecting **EDIT SETTINGS** from the Main Menu.

#### **Main Clock**

**Note 1:** The settings for the **Main Clock** are used with the **SET MAIN CLOCK>** key.

**Note 2:** The period length is used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

Display	Action
MAIN CLOCK-MODE TENTH SECOND? Y	When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute.  Press <yes> to set the main clock to display tenths of a second.  Press <no> to display whole seconds.</no></yes>
MAIN CLOCK-TIME PERIOD MM: SS*  MM:SS = minutes, seconds	Enter the correct amount of time per period in minutes and seconds on the number pad and press <b><enter></enter></b> .  For example, 3:00 per period.
	Note: Pressing <b><enter></enter></b> to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.

#### **Blood/Injury Time**

The maximum allowed blood and injury times are set for each competitor at the beginning of a match and reset to these times when the Reset Match function is performed.

When enabled, the blood and injury times are displayed in the main clock digits and the corresponding (home or guest) match score digits flash.

Display	Action
BLOOD TIME RESET MM:SS*	Enter the cumulative time for blood time outs in minutes and seconds on the number pad and press <b><enter></enter></b> .
MM:SS = current setting	For example, 5:00.

Display	Action
INJURY TIME RESET MM:SS*  MM:SS = current setting	Enter the cumulative time for injury time outs in minutes and seconds on the number pad and press <b><enter></enter></b> .  For example, 2:00.
BLOOD/INJURY SHOWN ON MAIN? N	Press <b><yes></yes></b> to display the blood/injury times on the LCD and the main clock digits of the scoreboard while the blood/injury clock is active.  Press <b><no></no></b> to display the time out time on the LCD only.

# **Recovery Time**

The maximum allowed recovery times are set for each competitor at the beginning of a match and reset to these times when the Reset Match function is performed.

Display	Action
RECOVERY TIME RESET MM:SS*	Enter the cumulative time for recovery time outs in minutes and seconds on the number pad and press <b><enter></enter></b> .
MM:SS = minutes, seconds	For example, 2:00.

# **Select Captions**

Display	Action
SELECT CAPTIONS ON 1+→ 2 OFF	This menu option allows for the controlled backlit captions to be turned ON/OFF.  Press the <1> key to select ON and OFF for captions controlled by control #1.
	Press the <2> key to select ON and OFF for captions controlled by control #2.

# **Weight Class**

Display	Action
WEIGHT CLASS ON Y/N? -OFF	This setting allows the use of weight classes. Press <b><yes></yes></b> to use weight classes, or press <b><no></no></b> to select not to use weight classes.

# **Display Lines for Weight Class**

Display	Action
# OF DISP LINES	This setting represents the number of lines used on the stat panel displays. It can only be set to 5 or 6.
N = number of lines	Press the <5> or <6> key and then <enter>.</enter>

# **Display Team Score**

Display	Action
DISPLAY NO TEAM SCORE Y/N?	This menu option allows for selection of having the Team Score display on the Matside advantage/team score module. If set to display it will show team score after the match is reset until an advantage time is started.
	Press <b><yes></yes></b> to select display ON.
	Press <no> to select display OFF.</no>

# **Shot Horn Control**

Display	Action	
SHOT HRN CONTROL SET= SHOT HORN	output for the shot clock	s the selection of what will control the k horn. Use the left or right arrow keys setting or use the number keys (0-3) as
	Press <b><enter></enter></b> when	the desired setting is shown.
	0= NO CONTROL	1= MAIN HORN
	2= SHOT HORN	3= MAIN & SHOT

# **Light Control**

Display	Action	
LIGHT CONTROL SET= CLK=0	This menu option allows the selection of what will control the output for the light strip displays. Use the left or right arrow keys to scroll to the desired setting or use the number keys (1-6) as short cuts.  Press <b><enter></enter></b> when the desired setting is shown.	
	1= CLK=0	2= CLK STOP
	3= (not used)	4= MAIN HORN
	5= CLK=0 & HRN	6= STOP & HRN

# **Switch Output**

The All Sport<sup>®</sup> 5500 console has a switch that can be used to run a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK=0.

To display the desired switch setting:

- 1. Press the number (0, 1, 2, 3) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.
- **2.** Press **YES>** to select the new setting.
- **3.** Press **NO>** or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
SWITCH OUTPUT=N 0-DISABLED?  N = current setting	The switch remains open at all times and any external devices are disabled.
SWITCH OUTPUT=N 1-CLOCK =0? N = current setting	In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered.  In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.
SWITCH OUTPUT=N 2-CLOCK =STOP? N = current setting	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.
SWITCH OUTPUT=N 3-MAIN HORN? N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when <b><horn></horn></b> is pressed.

# **Default Settings**

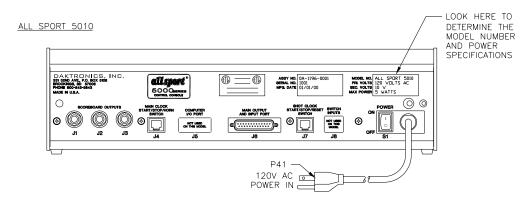
Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3
Tenth of a Second	No			
Period Length	2:00			
Blood Time	5:00			
Injury Time	2:00			
Blood Show on Main	No			
Recovery Time	2:00			
Select Captions	1-ON			
Weight Class On	No			
# of Display Lines	6			
Display Team Score	No			
Shot Horn Control	Main Horn			
Light Control	Clk=0			
Switch Output	1-Clock = 0			

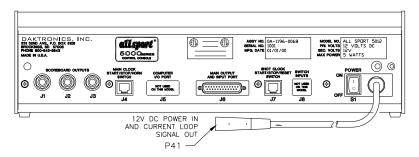
# **Appendix A: Reference Drawings**

Drawing Title	Drawing Number
Rear View, A/S 5010 Connector Assignments	A-102142
Block Diagram: AS5000 BB- VB and WR #1	A-124686
Block Diagram: AS5000 BB- VB and WR #3	A-124688
Schematic; Dual 1/4" Phone J-Box w/Shunt Jack	A-125316
Block Diagram- A/S 3000 or 5000 BB- VB and WR #2	A-125415
All Sport 5000, 25pin PCB J-Box Wiring	A-125416
Block Diagram: A/S 3000 or 5000 BB- VB and WR #4	
Channel Selection; Multiple Broadcast Group, Gen IV	
Installation Details, Gen VI Channel Selection Guide	A-1109870

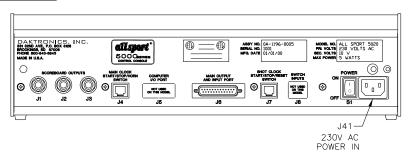
Reference Drawings 95



#### ALL SPORT 5012



#### ALL SPORT 5020



J6 - MAIN PORT

J1-J	3 - OUTPUT #1-#3
CONTACT	FUNCTION
TIP	CURRENT LOOP OUTPUT 1 +
RING	CURRENT LOOP OUTPUT 1 -
SHAFT	GND

J4	- START/STOP/HORN
PIN #	FUNCTION
1	SWITCH INPUT 2 -
2	SWITCH INPUT 1 -
3	RELAY OUTPUT -
4	RELAY OUTPUT +
5	SWITCH INPUT 1 +
6	SWITCH INPUT 2 +

PIN #	FUNCTION
1	EARTH
2	RS232 RECEIVE +
3	RS232 TRANSMIT +
4	NOT USED
5	NOT USED
6	NOT USED
7	C. L. OUTPUT 4 -/RS232 GND
8	SWITCH INPUT 1 +
9	CURRENT LOOP INPUT +
10	CURRENT LOOP INPUT -
11	RELAY OUTPUT +
12	NOT USED
13	NOT USED
14	CURRENT LOOP OUTPUT 1 +
15	CURRENT LOOP OUTPUT 1 -
16	CURRENT LOOP OUTPUT 2 +
17	CURRENT LOOP OUTPUT 2 -
18	CURRENT LOOP OUTPUT 3 +
19	CURRENT LOOP OUTPUT 3 -
20	NOT USED
21	SWITCH INPUT 1 -
22	CURRENT LOOP OUTPUT 4 +
23	RELAY OUTPUT -
24	10V AC/DC INPUT-P
25	10V AC/DC INPUT-N

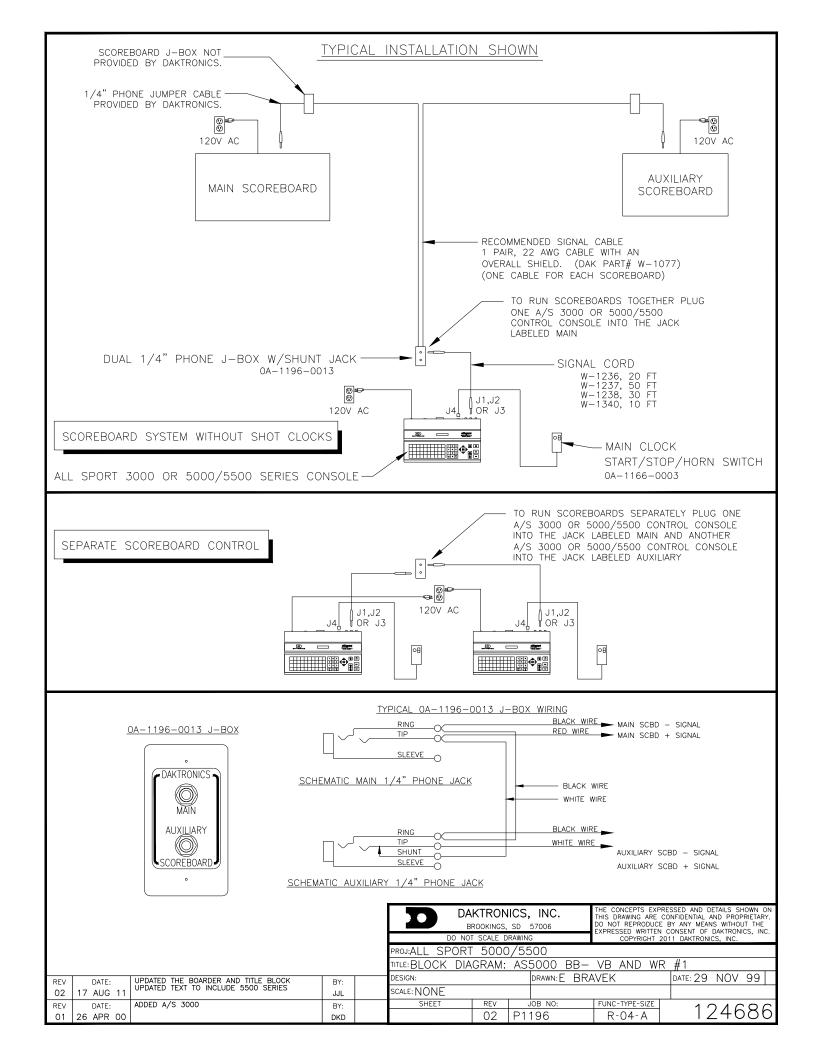
	J7 – SHOT/PLAY CLOCK
PIN #	FUNCTION
1	SWITCH INPUT 5 -
2	SWITCH INPUT 4 -
3	SWITCH INPUT 3 -
4	SWITCH INPUT 3 +
5	SWITCH INPUT 4 +
6	SWITCH INPUT 5 +

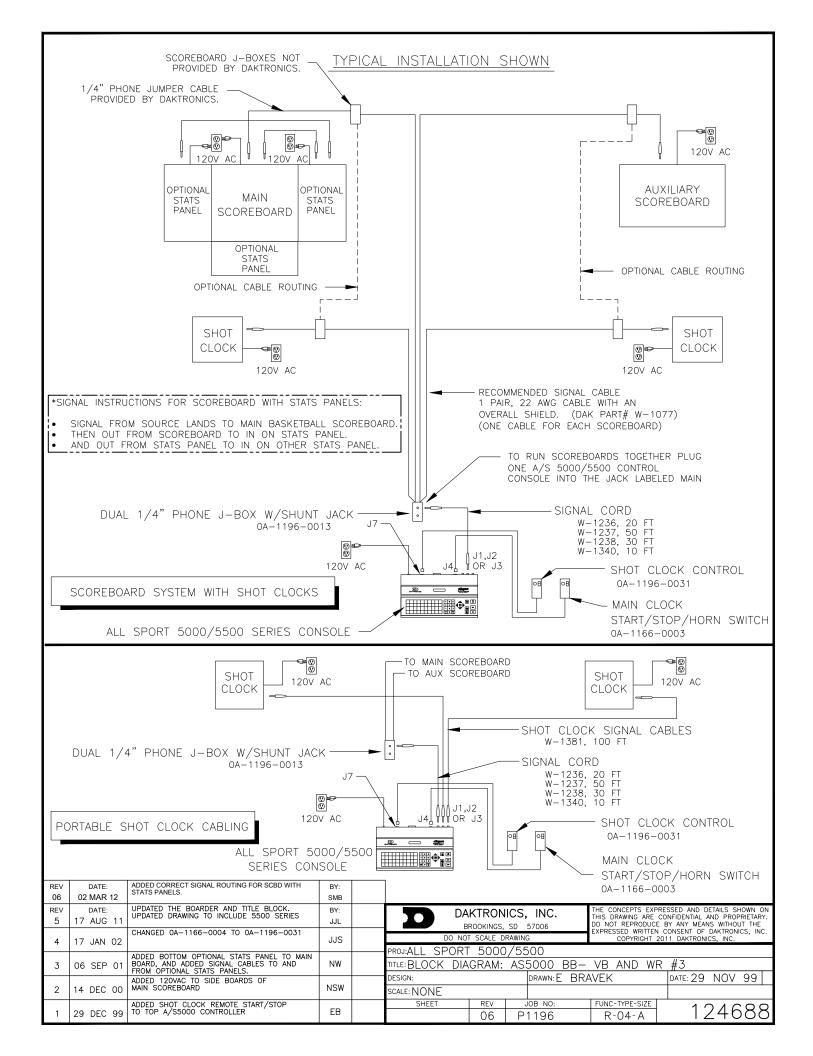
FOR STANDARD CODES, THESE FUNCTIONS ARE USUALLY ASSIGNED TO THE FOLLOWING TASKS:					
FUNCTION	USUAL TASK				
SW IN 1	MAIN CLOCK STOP/START				
SW IN 2	MAIN CLOCK HORN				
SW IN 3	NOT USED				
SW IN 4	SHOT/PLAY CLOCK STOP				
SW IN 5	SHOT/PLAY CLOCK RESET				
SW OUT	CLOCK STOP OUT				
CL OUT 1	SCOREBOARD OUTPUT				
CL OUT 2	SCOREBOARD OUTPUT				
CL OUT 3	SCOREBOARD OUTPUT				
CL OUT 4	DATA STREAM				

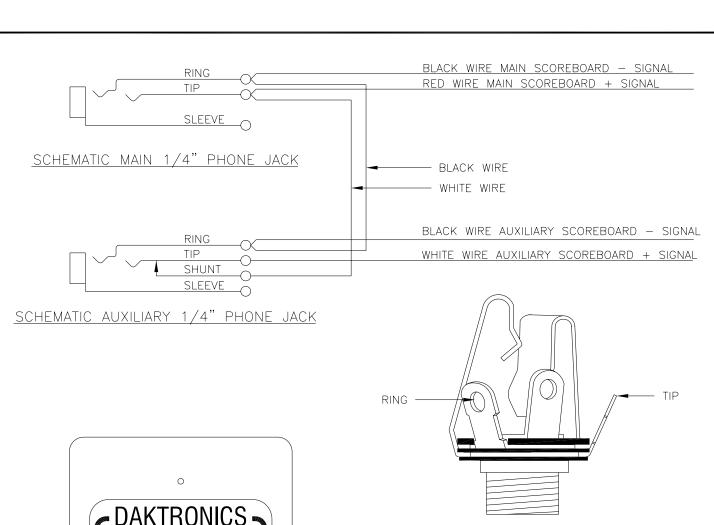
ALL SP	ORT 50	00 SERI	ES MODELS
MODEL #	FUNCT	ION	
5010	120V,	STANDARD	PROGRAMMING
5020	230V,	STANDARD	PROGRAMMING

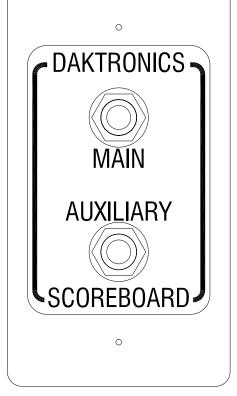
.3	05	OCT	01	ADDED A/S 5012 TO LAYOUT CHANGED DWG SCALE FROM 1=3 TO 1=4	NW			
				CHANGED TO BE FOR A/S 5010 CONSOLES ONLY			PROJ: AL	ī
2	24	APR	99	CHANGED TO BE FOR A/S SOTO CONSOLES UNLI	EB		TITLE: RE	÷
1	13	APR	aa	ADDED J10 ADDED A/S 5010 LAYOUT	EB		DES. BY:	Ē
1 13 ALIK		5 AT ( 99 ) ,			REVISION			
REV.	REV. DATE			DESCRIPTION		APPR.		Ī

_								
	DAKTRONICS, INC. BROOKINGS, SD 57006							
1	PROJ: AL	LL SPORT 5000 SERIES CONSOLES						
	TITLE: R	EAR VIEW, A/S 5010 CONNECTOR ASSIGNMENTS						
	DES. BY:	EBRAVEK DRAWN BY: EBRAVEK DATE: 27APR98						
-	REVISION	APPR. BY: 1-4 1196-R04A-102142						
		SCALE: $1=4$   1   90   $102$   $42$						

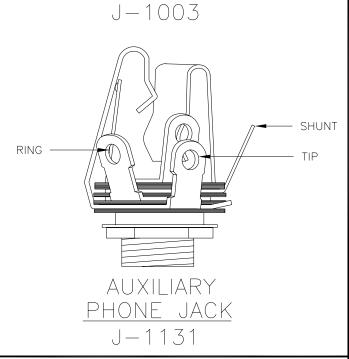








OA-1196-0013

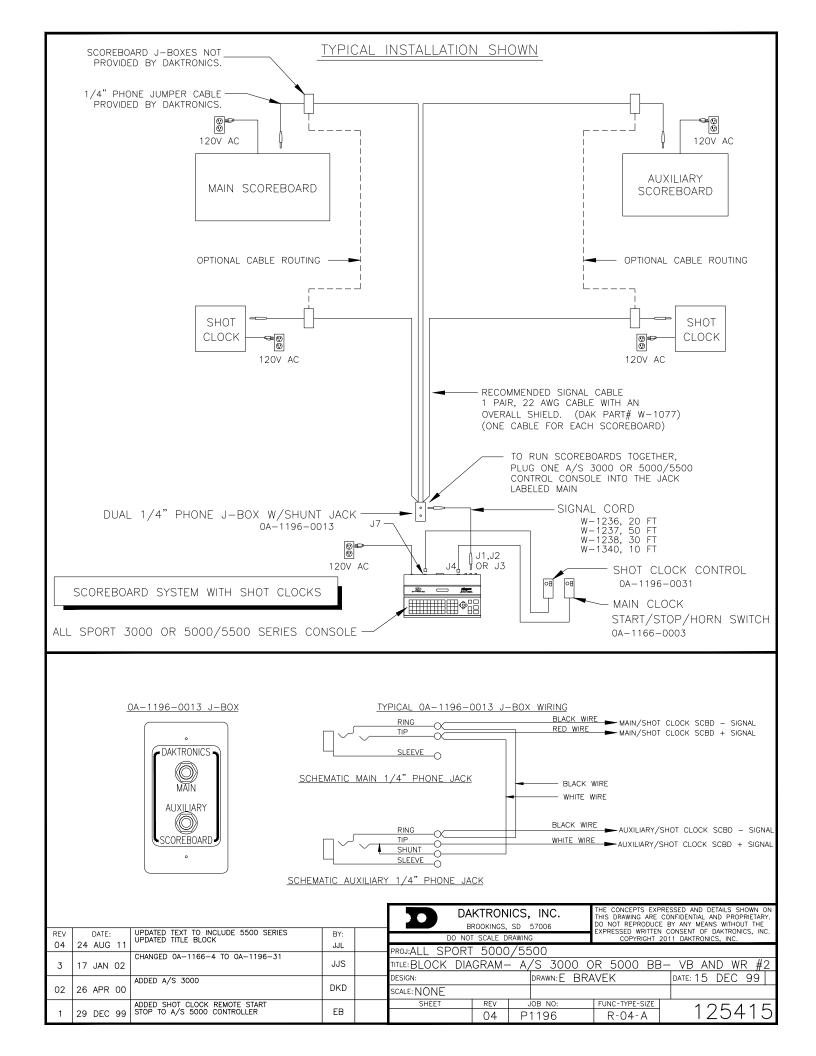


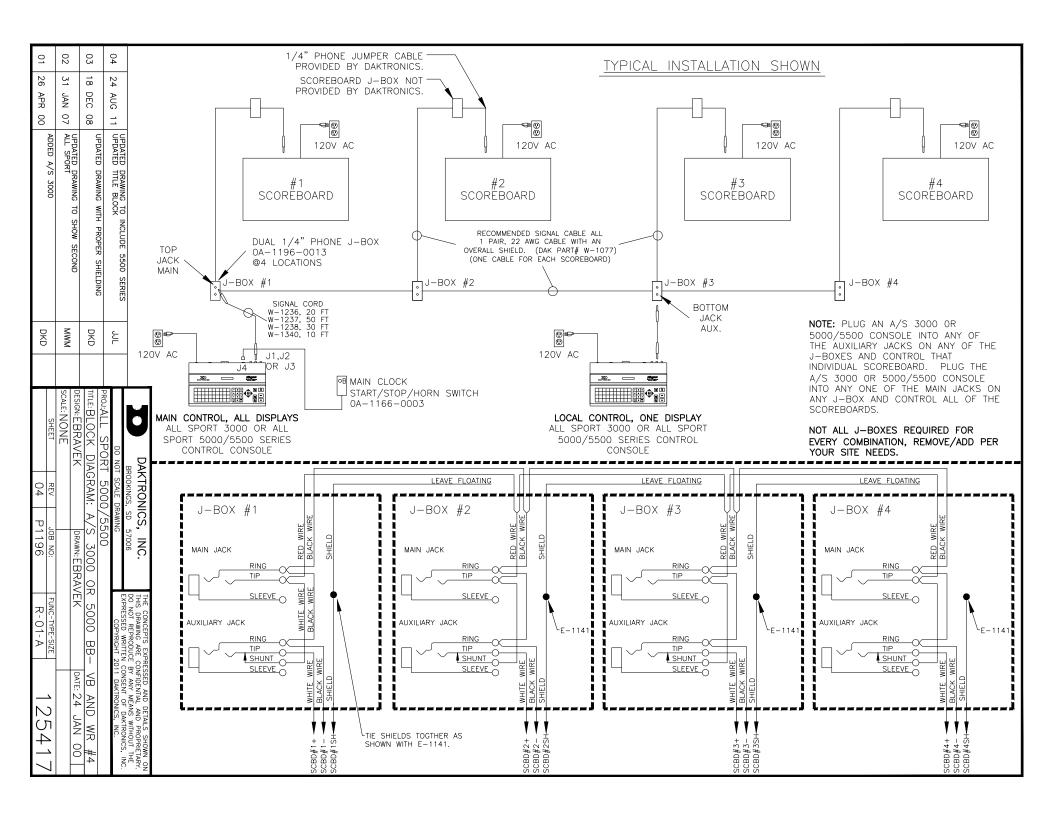
MAIN

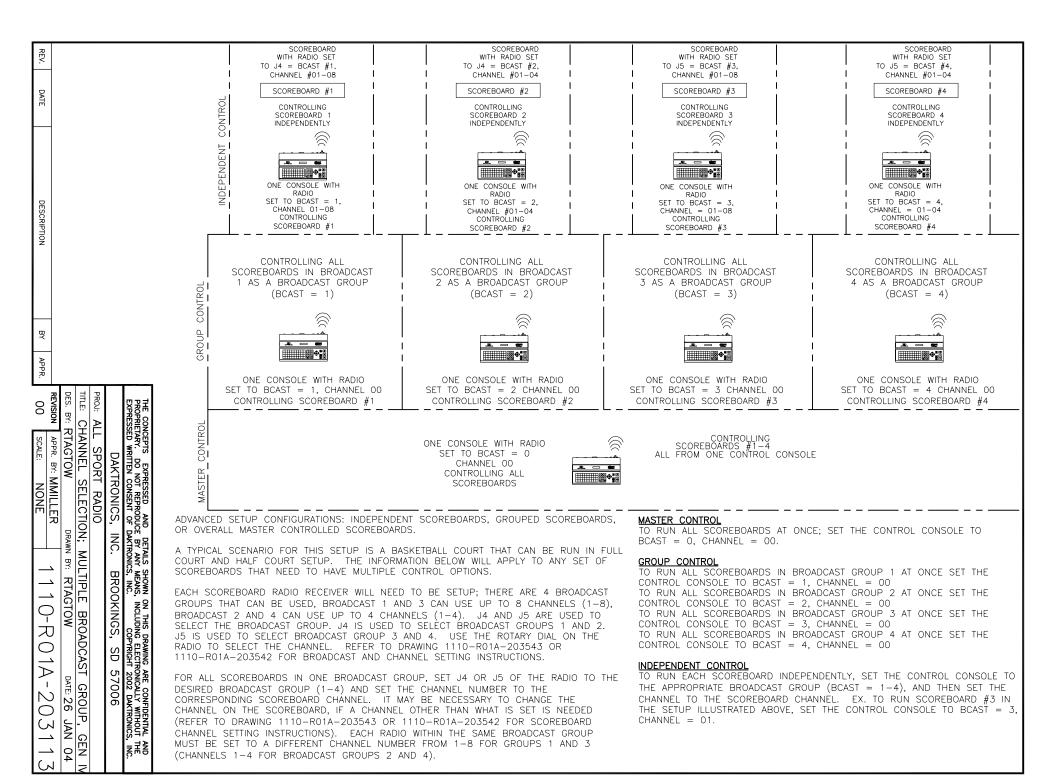
PHONE JACK

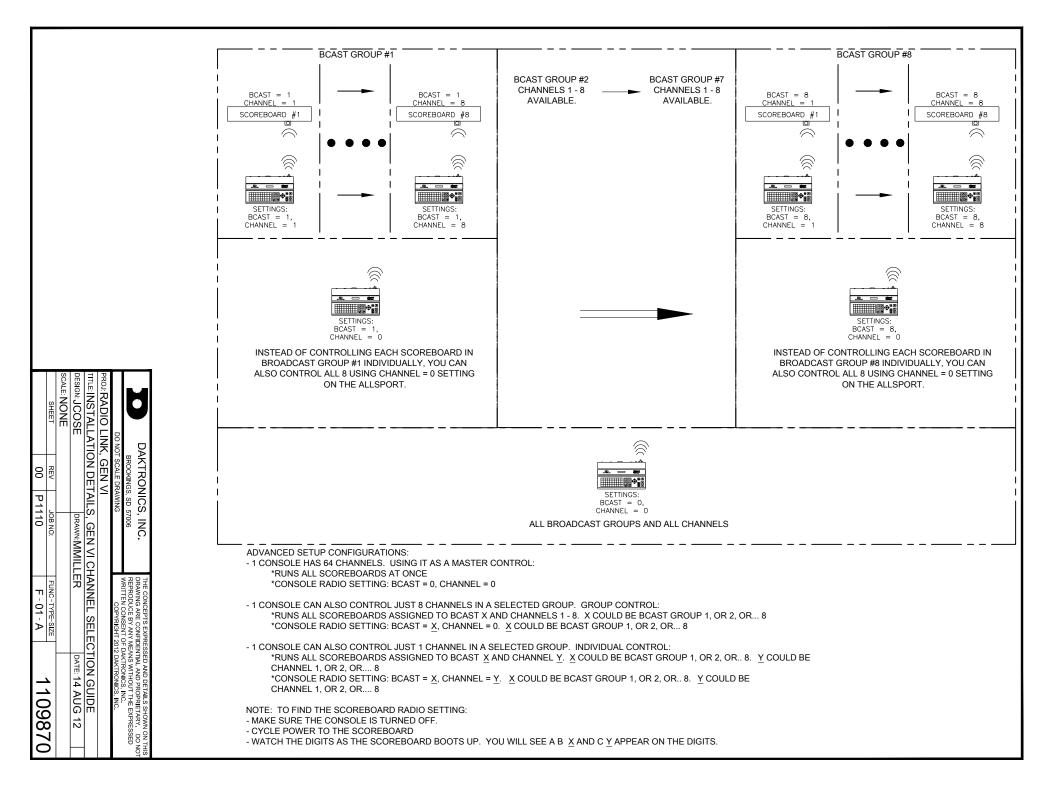
	DAKTRONICS, INC. BROOKINGS, SD 57006								
	PROJ:								
	TITLE: S	CHEMATIC; DUAL	1/4	" PHO	NE J-E	3OX V	V/SHUNT	JACK	
	DES. BY: E BRAVEK			и ву: Е	BRAVE	(	DATE: <b>15</b>	DEC	99
_		APPR. BY:		1 1	06-0	$2 \cap 7$	χΛ_1 O	ニス	16
₹.	00	SCALE: NONE			90 r	7 U L	3A-12	.00	10

REV. DATE DESCRIPTION BY APPR.







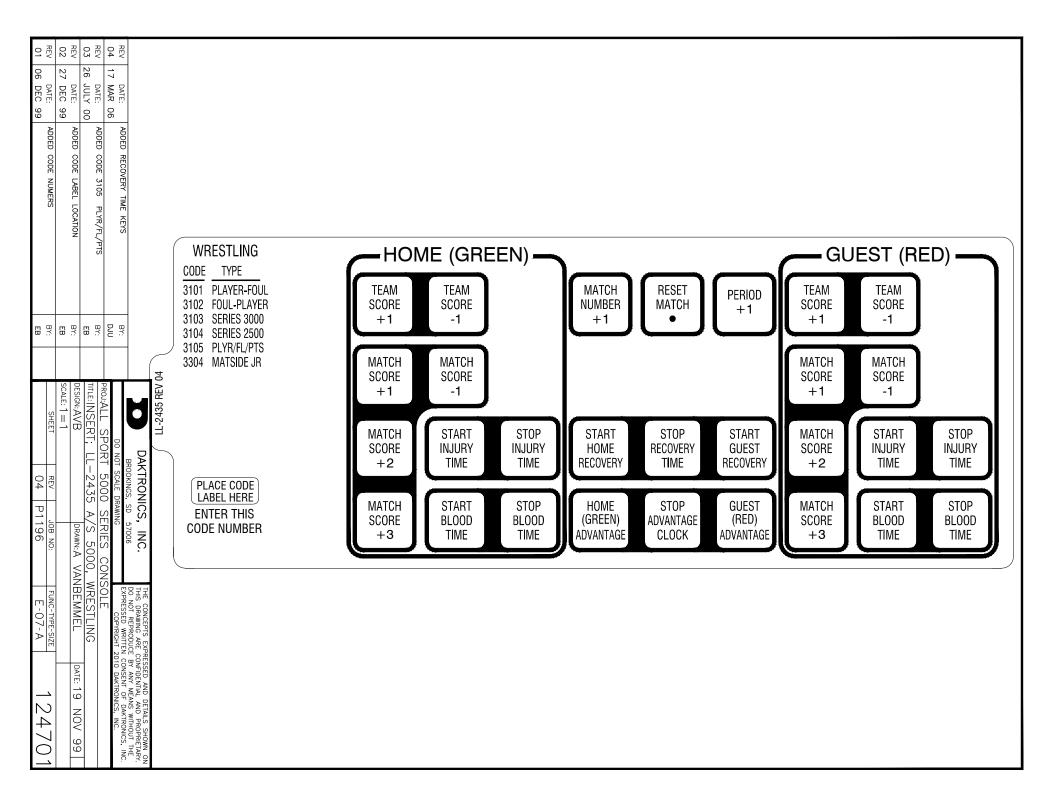


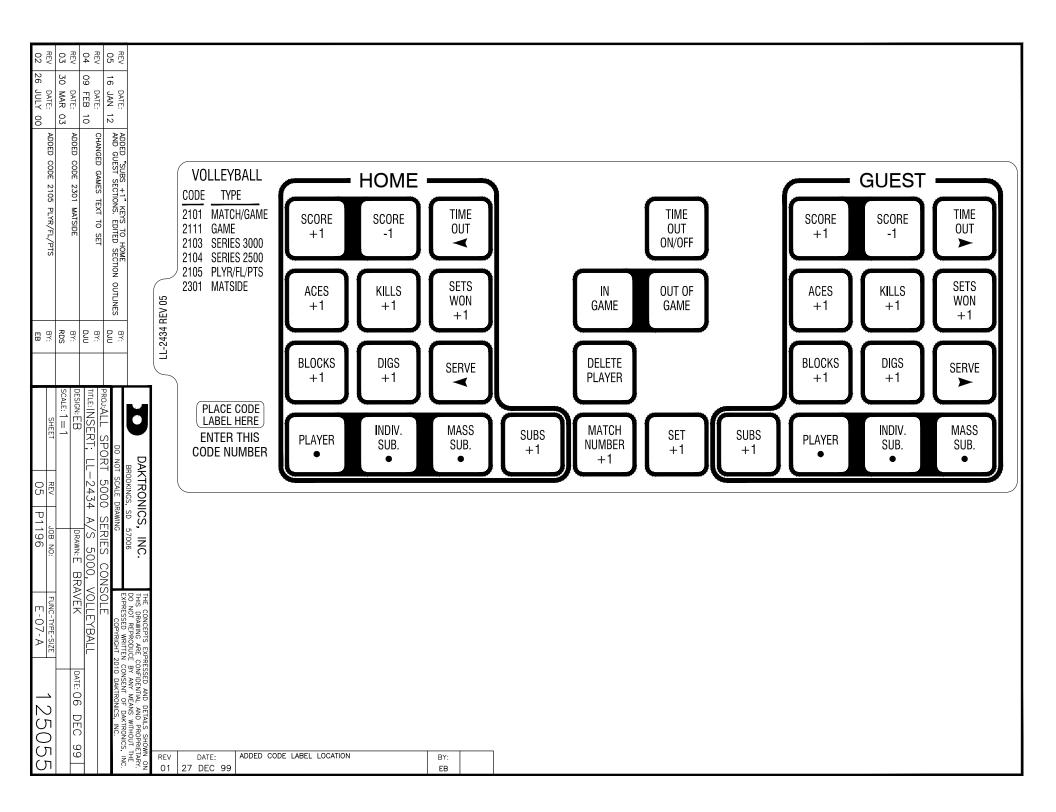
## **Appendix B: Sport Inserts**

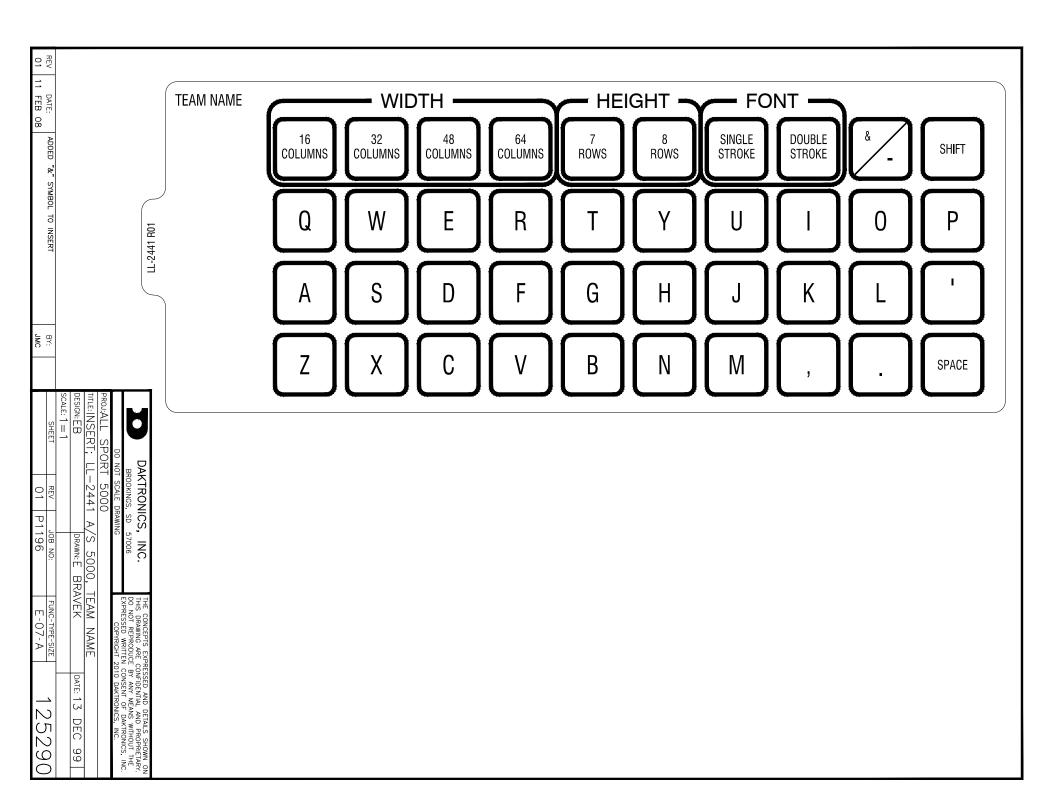
Drawing Title	Drawing Number
Insert, Basketball, LL-2433	A-120121
Insert; LL-2435 A/S 5000, Wrestling	A-124701
Insert; LL-2434 A/S 5000, Volleyball	A-125055
Insert; LL-2441 A/S 5000, Team Name	A-125290
Insert; Segment Timer	A-129357

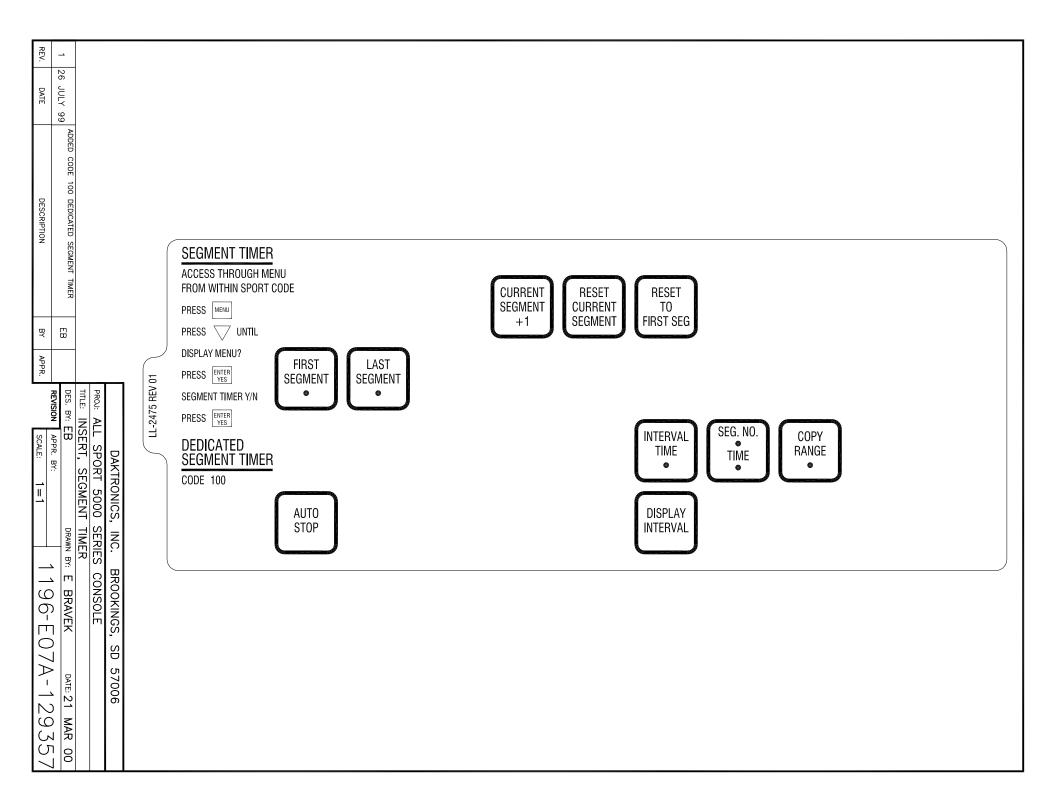
Sport Inserts 97

REV.	05	06	07												
DATE	19 FEB 04	24 FEB 04	30 MAR 04												
DESCRIPTION	ADDED CLEAR TEAM FOULS KEY	UPDATED REVISION TEXT TO MATCH SPEC DWG	ADDED CODE 1301 MATSIDE		BASKETBAL CODE TYPE 1101 PLAYER-FO 1102 FOUL-PLAY	UL SCORE	- HOME	TIME OUT	RECALL SHOT	SET SHOT	TIME OUT	SCORE +1	GUEST SCORE -1	TIME	
ВҮ	DJU	DJU	RDS		1103 SERIES 300 1104 SERIES 250	0			TIME	TIME	ON/OFF				
APPR.				V 07	1105 PLYR/FL/P 1301 MATSIDE 1401 HKY W/O S	SCORE	TEAM FOULS	BONUS		IN GAME	OUT OF GAME	SCORE +2	TEAM FOULS	BONUS	
07	<b></b>	PROJ: A		LL-2433 REV 07	1402 HKY W/S00		+1						+1		<b>!</b>
APPR. BY: SCALE:	AVB	L SPORI	DAKT	ll.		SCORE +3	TEAM FOULS -1	POSS		DELETE PLAYER	BLANK PLAYER FOUL	SCORE +3	TEAM FOULS -1	POSS >	
1 1	DRAWN BY	INSERT, BASKETBALL, LL-	DAKTRONICS, INC.		PLACE COD LABEL HER ENTER THI CODE NUMB	PLAYER	INDIV. SUB.	MASS SUB.		CLEAR TEAM FOULS	PERIOD +1	PLAYER	INDIV. SUB.	MASS SUB.	
1196-E07A-120121	A VANB	CONSOLE 2433	BROOKINGS, SD 57006												









## **Appendix C:** Sport Code Numbers

Drawing Title	Drawing Number
Address Table, 1 through 128	A-115078
4 Column LED Driver II; Specifications	A-123783
All Sport 5000 Current Loop Output Specifications	
Specifications; Driver, MCAST, 16 Col	A-284554
Address Table; Driver, MCAST, Add DIP Switch	
Address Table; Driver- MCAST- TNMC DIP Switch	A-284773

#### **Notes:**

- All scoreboards are controlled by a 16 column LED driver except where noted by the column numbers to configure for a 4 or 8 column LED driver.
- Use drawings A-284554 and A-284772 when setting the address for a 16 column LED driver.
- Use drawings A-115078 and A-123783 when setting the address for a 4 column LED driver.

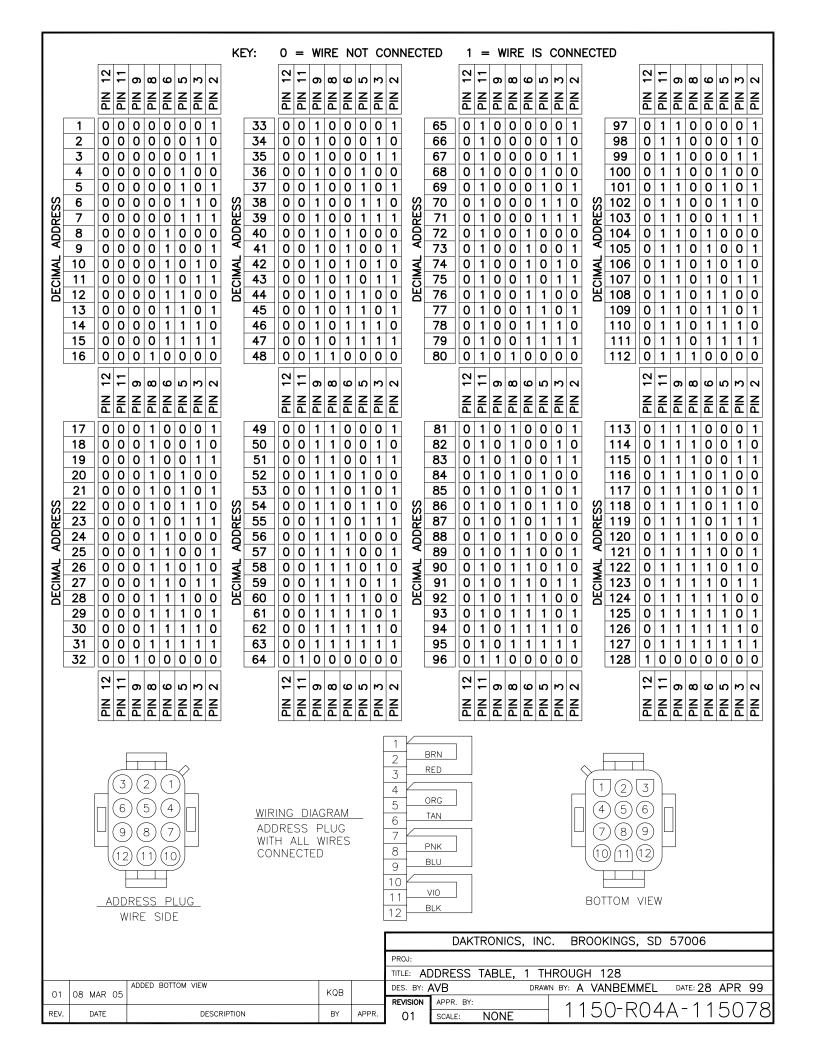
## **C.1** Indoor Model Numbers

Model	Address	Basketball	Volleyball	Wrestling	Hockey	Football
BB-314	17	1105	2105	3105	4105	6105
BB-3101	17	1105	2105	3105	4105	
BB-3102	17	1105	2105	3105	4105	6105
BB-3103	17	1101,1102 <sub>1</sub>	2101,2111 2	3101,3102 <sub>3</sub>		
BB-3104	17	1101,1102 <sub>1</sub>	2101,2111 2	3101,3102 <sub>3</sub>		
BB-3105	17	1105	2105	3105	4105	
BB-3106	17	1105	2105	3105	4105	6105
BB-3107	17	1101,1102 <sub>1</sub>	2101,2111 2	3101,3102 <sub>3</sub>		
BB-3108	17	1101,1102 <sub>1</sub>	2101,2111 2	3101,3102 <sub>3</sub>		
BB-3114	1 + Columns 5-8	All				
BB-3115	1	All	All <sub>4</sub>	All <sub>4</sub>	All <sub>4</sub>	
BB-3121	17	1105	2105	3105	4105	
BB-3123	17,14	1105	2105	3105	4105	6105
BB-3124	17,14	1105	2105	3105	4105	6105
BB-3125	17	1101,1102 <sub>1</sub>	2101,2111 <sub>2</sub>	3101,3102 <sub>3</sub>		
BB-3126	17	1101,1102 <sub>1</sub>	2101,2111 2	3101,3102 <sub>3</sub>		
BB-3142	17	1101	2101	3101	4105	6105
BB-3145	17	1101	2101	3101	4105	
BB-3146	17	1101	2101	3101	4105	
BB-3147	17	1101	2101	3101	4105	
BB-3153	17	1101,1102 1	2101,2111 2	3101,3102 <sub>3</sub>		
SD-3101	23,24,25,26	1101,1102	2101	3101		
SD-3102	23,24,25,26	1101,1102	2101	3101		
SD-3103	23,24,25,26,27,28	1101,1102	2101	3101		
ST-3001	17	1101	2101	3101	4105	6105
TI-3031	1 + Columns 1-4	All	All	All	All	

Sport Code Numbers 99

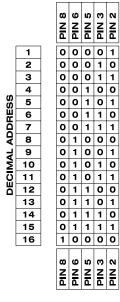
## **Notes:**

- 1. Code 1101 is Player-Foul and code 1102 is Foul-Player
- 2. Code 2101 is Game Number & Match Number and code 2111 is Game Number only
- 3. Code 3101 is Match Number and code 3102 is Advantage Time
- 4. Game Clock only



## KEY: 0 = WIRE NOT CONNECTED 1 = WIRE IS CONNECTED TO ANY GROUND PIN (1,4,7,10)

J19 ADDRESS AND COLUMN SELECT JACK



		PIN 8	PIN 6	PIN 5	PIN 3	PIN 2
	17	1	0	0	0	1
	18	1	0	0	1	0
	19	1	0	0	1	1
[	20	1	0	1	0	0
DECIMAL ADDRESS	21	1	0	1	0	1
뭂	22	1	0	1	1	0
₫	23	1	0	1	1	1
4	24	1	1	0	0	0
1	25	1	1	0	0	1
È	26	1	1	0	1	0
ပ္က	27	1	1	0	1	1
2	28	1	1	1	0	0
	29	1	1	1	0	1
	30	1	1	1	1	0
	31	1	1	1	1	1

8 8 2 8 8

TIME OF DAY SELECT	6 NId
DISABLE	0
ENABLE	1

COLUMN SELECT	PIN 12 PIN 11
COLUMNS 5-8	0 0
COLUMNS 1-4	0 1
COLUMNS 9-12	1 0
COLUMNS 13-16	1 1
	PIN 12 PIN 11



WIRING DIAGRAM
ADDRESS PLUG
WITH ALL WIRES
CONNECTED



J	17 MAIN
PIN	FUNCTION
1	SIG-P
2	SIG-N
3	GND-N
4	CLOUT-P
5	CLOUT-N
6	16VAC-N
7	GND-N
8	EARTH-N
9	16VAC-P
10	GND-N
11	SWIN-P
12	SWIN-N

J1	-4 DIGIT
PIN	FUNCTION
1	SEGC-N
2	SEGB-N
3	SEGA-N
4	SEGF-N
5	SEGE-N
6	SEGD-N
7	+VCC-P
8	SEGH-N
9	SEGG-N

J19	ADDRESS
PIN	FUNCTION
1	GND-N
2	ADD0-N
3	ADD1-N
4	GND-N
5	ADD2-N
6	ADD3-N
7	GND-N
8	ADD4-N
9	ADD5-N
10	GND-N
11	COLS1-N
12	COLS2-N

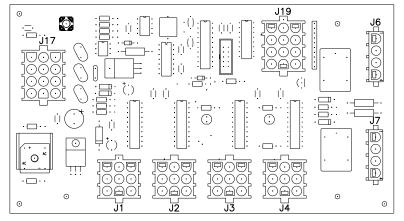
2	AUXOUT-N
3	120SW-P
4	120SW-N
J.	7 RELAY
PIN	FUNCTION
1	N/C
2	AÚXOUT-N
3	120SW-P

J6 RELAY

PIN FUNCTION

HORNOUT-N

## OP-1150-0130 UNCOATED OR OP-1150-0131 COATED 4 COLUMN LED DRIVER II



## NOTE

1120SW-N

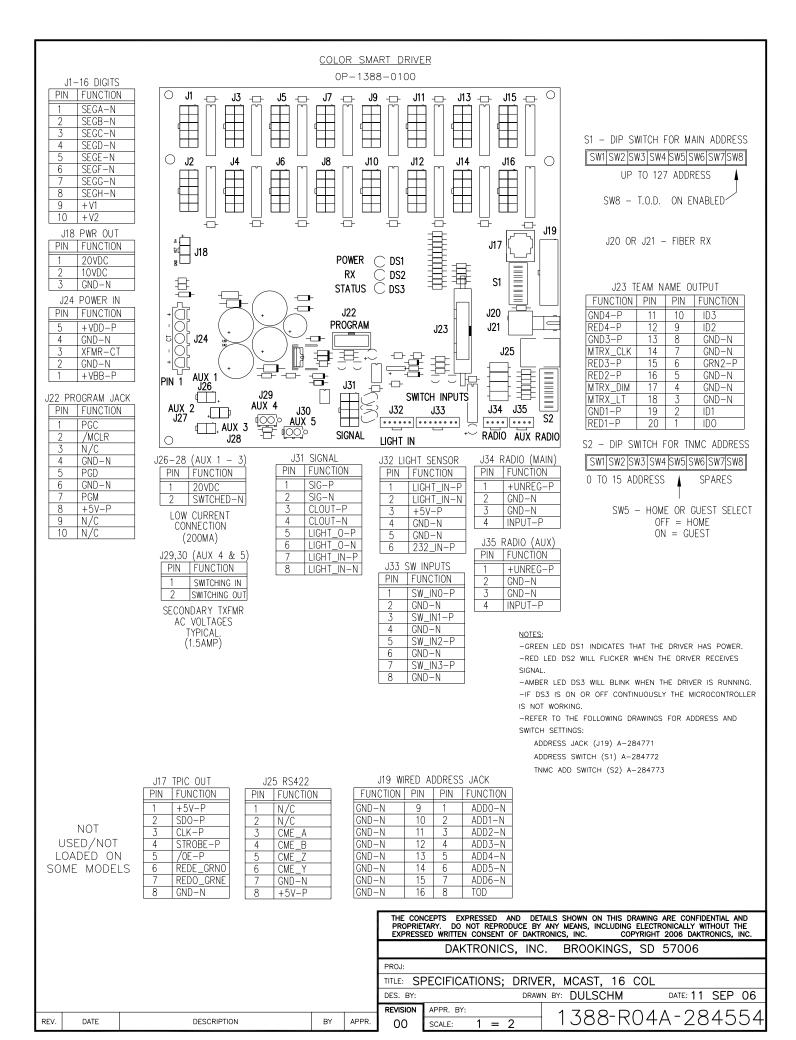
- -WITH NO ADDRESS PINS SELECTED THE DRIVER WILL DEFAULT TO A/S 4000 PROTOCOL
- -COLUMN SELECT PINS WORK FOR EITHER A/S 4000 OR A/S 5000 PROTOCOL
- -DRIVER WILL DEFAULT TO COLUMNS 5-8
- -GREEN LED INDICATES THE DRIVER HAS POWER
- -RED LED WILL BE ON OR BLINKING WHEN THE DRIVER IS RECEIVING SIGNAL
- -REDRIVE CIRCUIT IS PROCESSOR REFRESHED (REFER TO DWG A-128429 FOR FURTHER INFORMATION ON THE CURRENT LOOP REDRIVE CIRCUIT SPECIFICATIONS)

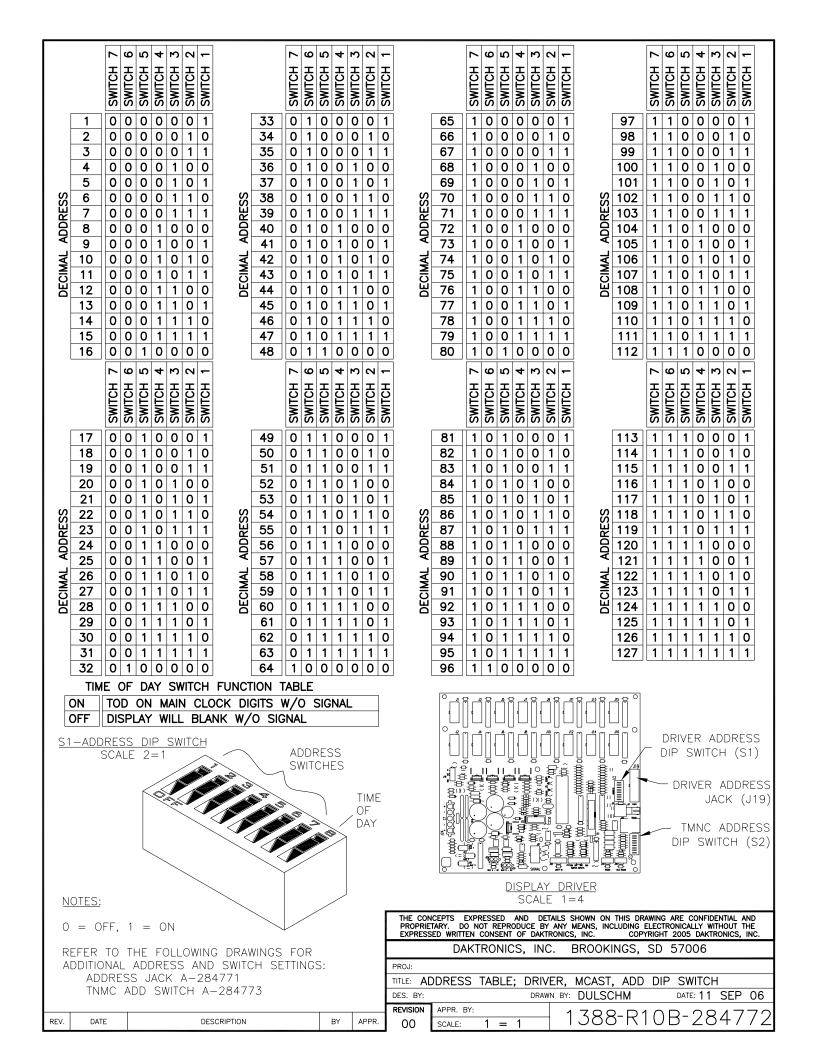
	COLUMN SELECT 0				COL		1		COL		2	ll .	COL			
	NO JUMPER CONNECTIONS		CONNECT J19 PIN 10 TO 11		CONNECT J19 PIN 10 TO 12			CONNECT J19 10 TO 11&12								
DATA INPUT DIGIT NUMBER	5	6	7	8	1	2	3	4	9	10	11	12	13	14	15	16
DIGIT OUTPUT CONNECTOR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

ALSO, COLUMN SELECT #1 MAKES THESE CHANGES:
INPUT DATA DIGIT 5, SEGMENT H
IS SENT TO DIGIT OUTPUT NO. 1, SEGMENT H.
INPUT DATA DIGIT 9, SEGMENT H
IS SENT TO DIGIT OUTPUT NO. 2, SEGMENT H.

3	21 DEC 00	ADDED HORN SEGMENT INFORMATION	EB			DAKTRONICS,	INC. BROOKINGS, SD	57006
		CHANGED TIME OF DAY ENABLE TO			PROJ:			
2	2 OCT 00	DISABLE (0) AND ENABLE (1)	NSW		TITLE: 4	COLUMN LED DR	IVER II; SPECIFICATIONS	S
1		REMOVED "STAND ALONE" FROM WORDING FOR TIME OF DAY ENABLE.	AVB		DES. BY:	B □	DRAWN BY: E BRAVEK	DATE: 08 NOV 99
<u> </u>	23 3Ei 00				REVISION	APPR. BY:	1150-PO/	A 107707
REV.	DATE	DESCRIPTION	BY	APPR.	03	SCALE: NONE	T 1130-R04	4-123/83

## RECOMMENDED MAXIMUM CABLE LENGTH WITH ONE RUN AS SHOWN = 2000' 2000' IN DRIVER OUT J1,J2 ∬J1,∪∠ | OR J3 RECOMMENDED MAXIMUM CABLE LENGTH WITH COMBINATION OF TWO RUNS FROM EITHER THE ALL SPORT 5000 OUTPUT OR DRIVER REDRIVE CIRCUIT AS SHOWN = 2000' MAXIMUM REDRIVES ALLOWED: 10 2000' 2000' 2000' IN DRIVER OUT IN DRIVER OUT IN DRIVER OUT J1,J2 FOR J3 RECOMMENDED MAXIMUM PARALLEL LOADS ON REDRIVE CIRCUIT OR ALL SPORT 5000 OUTPUT = 5 PARALLEL LOADS MAXIMUM 2 STACKS WITH REDRIVES PARALLEL LOADS PARALLEL LOADS FROM ANY DRIVER FROM A/S OUTPUT REDRIVE CIRCUIT (MAX CABLE LENGTH OF (MAX CABLE LENGTH OF 2000' FROM THE A/S OUTPUT TO LAST PARALLEL 2000' FROM THE DRIVER OUTPUT TO THE LAST DRIVER) PARALLEL DRIVER) IN DRIVER OUT IN DRIVER OUT J1,J2 OR J3 IN DRIVER OUT THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2011 DAKTRONICS, INC. DAKTRONICS, INC. BROOKINGS, SD 57006 DO NOT SCALE DRAWING PROJ: TITLE: ALL SPORT 5000 CURRENT LOOP OUTPUT SPECIFICATIONS DESIGN: DRAWN: EBRAVEK DATE: 26 FEB 00 SCALE: FUNC-TYPE-SIZE SHEET REV JOB NO: 128429 P1196 01 R-01-A





TYPICAL TNMC FUNCTIONS ALL OFF = 2212 3 4 8 2 <del>-</del> 4 10 10 <del>-</del> 4 8 2 <del>-</del> SWITCH 17 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 49 (222)34 0 0 1 0 18 0 0 1 0 50 0 0 1 0 (223)2 0 0 1 0 0 0 1 0 0 1 0 0 1 35 1 19 1 51 1 3 0 0 1 1 (224)0 1 0 0 0 1 0 0 0 1 0 36 20 52 0 0 1 0 0 4 (225)37 0 1 0 1 21 0 1 0 1 53 0 1 0 0 1 0 5 1 22 0 1 1 0 1 1 0 1 1 38 0 1 1 0 0 54 6 0 ADDRESS ADDRESS ADDRESS ADDRESS 39 0 1 1 1 23 0 1 1 55 0 1 1 7 0 1 1 1 1 0 0 0 40 1 0 0 0 24 56 1 0 0 0 8 1 0 0 0 41 1 0 0 1 25 1 0 0 57 1 0 0 1 1 9 1 0 0 1 42 1 0 1 0 26 1 0 1 0 58 1 0 1 10 1 0 1 0 43 1 0 1 1 27 1 0 1 1 59 1 0 1 1 0 1 11 1 44 1 1 0 0 28 1 1 0 0 60 1 1 0 0 1 1 0 0 12 1 1 0 45 1 1 0 1 29 1 61 1 1 0 1 1 13 1 0 1 1 1 1 0 1 1 1 0 1 1 1 46 30 62 0 14 1 1 1 0 1 1 1 1 1 1 1 1 1 47 1 31 1 63 15 | 1 | 1 | 1 | 1

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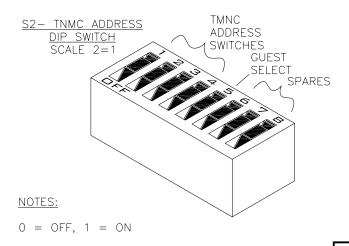
0000

## GUEST SELECT SWITCH FUNCTION TABLE

						DISPLAY
OFF	HOME	DATA	SENT	TO	FIRST	DISPLAY

32 0 0 0 0

	RESERVED FOR FUTURE USE
SPARE 2	RESERVED FOR FUTURE USE
SPARE 3	RESERVED FOR FUTURE USE

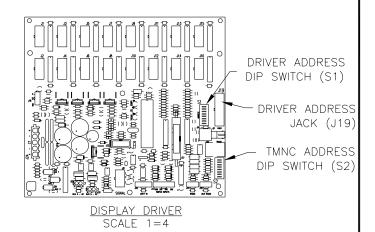


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0000

REFER TO THE FOLLOWING DRAWINGS FOR ADDITIONAL ADDRESS AND SWITCH SETTINGS: ADDRESS JACK A-284771 ADDRESS SWITCH A-284772

01	15 FEB 08	ADDED TYPICAL TNMC FUNCTIONS	DS		D
5	13 1 1 1 00				R
REV.	DATE	DESCRIPTION	BY	APPR.	



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DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: ADDRESS TABLE: DRIVER- MCAST- TNMC DIP SWITCH DRAWN BY: DULSCHM DES. BY:

DATE: 11 SEP 06 REVISION APPR. BY: 1388-R10A-2847 SCALE: 1 = 1

01

## Appendix D: Manual References

Document Title	Document Number
Multicast Driver Bootload Update Procedure	ED-18728

Manual References 101

## **MultiCast Driver Bootload Update Procedure**

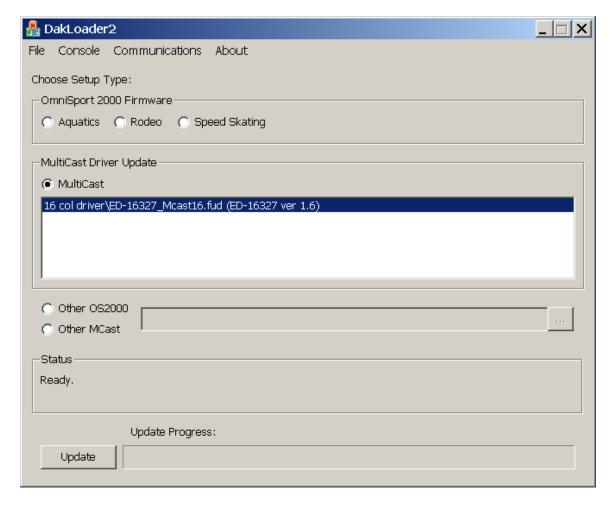
MultiCast drivers feature a "bootloader" that allows firmware updates to be performed in the field using a computer and an AllSport 5500 control console. The console acts as a signal converter between the computer and the scoreboard network.

## **Requirements:**

The AllSport 5500 must have software version 1.0.5 or later. The 16 column MultiCast driver (0P-1388-0100) must have software version 1.3 or later. In the future, any new MultiCast receiver designs will include the bootload functionality in all versions.

## **Instructions:**

- 1. Make sure that the AllSport 5500 console you are planning to use has a version of firmware that supports bootloading (see Requirements above). If it does not, contact customer service to request an AllSport PROM update.
- 2. Make sure the scoreboard driver has a version of firmware that supports bootloading by cycling the scoreboard power and observing the power up sequence. An "rx.x" message will be displayed, where "x.x" is the version number. If this is not 1.3 or later, the drivers will have to be updated with a programming board or exchanged for newer versions.
- 3. Download the DakLoader Software and the field update file.
  - a. Connect to the internet and go to <a href="http://dakfiles.daktronics.com/downloads/Sports\_Products/Multicast/">http://dakfiles.daktronics.com/downloads/Sports\_Products/Multicast/</a>
  - b. Click on the directory describing the type of driver you wish to update. Currently the only option is "16 col driver", but in the future there may be other drivers that can be updated as well.
  - c. Click on the DakLoader2.exe file. A dialog box will appear. Click on the "save" button, and save the file to your desktop.
  - d. Click on the file with the ".fud" extension. This is the Field UpDate file. Save it to your desktop too.
- 4. Connect your computer serial port to the AllSport 5500.
  - a. If your console model has the "COMPUTER PORT" (J5) option loaded, you can connect to this port using a standard 9 pin serial cable.
  - b. You can also connect to the "I/O PORT" (J6) using a 25 pin to 9 pin cable.
- 5. Open the DakLoader software you saved to your desktop in step 2. A window similar to the one shown below should appear.



- 6. Click on the "Communications" menu item, and select the appropriate communications port.
- 7. Select the appropriate update file
  - a. If you know the ED number for the firmware you need to update, you may select the "MultiCast" radio button and find the appropriate file in the list box, which is populated with files DakLoader has found on your computer. As of this writing there is only one ED available, but in the future there may be multiple options.
  - b. Otherwise, select the "Other AS5500" radio button, then click on the button to browse to the update file you saved in step 2d.
- 8. Click the "Update" button. The "Status" window will now say "Waiting for the update process to start on the AllSport."
- 9. Start the update process on the AllSport console.
  - a. On the AllSport console, press the "MENU" button, and use the down arrow button to navigate to the "MENU- MAIN ENTER DISPLAY MENU?" item. Press "ENTER" to select this item.
  - b. Use the down arrow button to navigate to the "MENU-DISPLAY RUN DOWNLOAD Y/N?" item. Press enter to start the process.

- c. The AllSport LCD should immediately show "HEADER RECEIVED WAIT FOR ERASE", and the status window in the DakLoader software should change to "Sending field update...".
  - i. If the process does not start, check the serial cable connection and the communications port selection in the DakLoader software. The AllSport will time out after 20 seconds and allow you to try again.
- d. There will be a delay of a few seconds while the AllSport sends a command to the scoreboard network instructing all drivers to erase their firmware. Both the AllSport and the DakLoader software will then show the progress of the update.
- 10. Monitor the status of the update on the scoreboard:
  - a. MultiCast drivers will display the status codes shown in the table below on their first two columns:

Status Code	Meaning
"bA"	Bootload mode entered, looking for an active comm. channel.
"bb"	Comm found, waiting for the Download Firmware command.
"be"	Download Firmware command received, erasing memory.
"bd"	Memory erased, receiving new firmware file.
"bE"	Bootload successful, waiting for command to exit bootloader.
"b1"	Command fail, version specified in header is older than current version.
"b2"	Command fail, ED number specified in header doesn't match current ED.
"b3"	Command fail, bad command checksum.
"b4"	Unused.
"b5"	Flash erase failed.
"b6"	Bad hex record checksum.
"b7"	Unrecognized hex record type.
"b8"	Hex file receive timeout.

- b. When the entire update file has been transmitted, the AllSport will show "FILE TRANSFERRED RETRY Y/N?"
  - i. If there are any drivers on the network that do not show the "bE" status code, you may press the "ENTER" button to retry the update. Only those drivers that failed the first attempt will now receive the update.
  - ii. If all drivers updated successfully, press the "CLEAR" button on the AllSport console to return to normal operation. The console will indicate to the network that the update process is complete and all drivers will exit the bootload mode.

## Appendix E: Console Revision History

**Version 1.0.0** *Release date: 8 January 2007* 

• Initial software release

**Version 1.0.3** Release date: 28 February 2007

- Added Team Name captions
- Added electronic captions for stats panels
- Fixed the operation of test codes

**Version 1.0.4** Release date: 6 March 2007

- Changed initialize of cnfg pointer in BB, BB, and WR before any other functions
- Changed the locations of the address, digit#, and color test keys in the test code

**Version 1.0.5** Release date: 18 June 2007

Added download of driver program through console from Dakloader software

**Version 1.0.6** Release date: 20 November 2007

Added color test to scoreboard test code 0002

• Removed MDP scoreboard functions and references to MDP items

**Version 1.0.7** *Release date: 18 June 2008* 

- Added configuration for horn output
- Added configuration for light output
- Changed dimming to update when selected in menu
- Added more error checking to driver program download
- Added multiplexed driver outputs for ply/fl/pts boards
- Added hockey codes
- Added football codes
- Added multipurpose timer
- Corrected so clock will show default color if clock is not set for changing color

**Version 1.0.8** Release date: 10 December 2008

- Changed shot clock data to be sent with no minutes
- Fixed partial time out so it had a warning horn time
- Added a reset to the number of time outs in volleyball when game +1 is done

**Version 1.0.9** *Release Date: 8 January 2010* 

- Made changes to the advantage timer in wrestling so it does not count down from zero if sides are switched at the zero count
- Added full and partial timeout data to scoreboard refresh in basketball
- Added a new test identity code to the 5500 for production testing

## **Version 1.1.0** Release Date: 12 March, 2010

- Changed game and games won to set and sets won in volleyball codes
- Added the selection for radio sync and no-sync in the display menu
- Changed so the radio settings are sent when a code is selected, using previous settings

## **Version 4.0.0** Release Date: 4 April 2011

- Added support for the use of serial EEprom as non-volatile memory.
- Added an offset selection for RTD output.
- Fixed the Clear Hit/Error function to set RTD to space (20hex) and not blank.(Baseball code is not yet released but was added to follow the AS-5000 changes)

## **Version 4.0.1** Release Date: 22 Aug 2011

- Changed power loss detection to not show battery low message if not running from battery.
- Changed refresh tables to use dedicated game clock RTD items.

# Appendix F: Daktronics Warranty and Limitation of Liability



## DAKTRONICS WARRANTY AND LIMITATION OF LIABILITY

This Warranty and Limitation of Liability (the "Warranty") sets forth the warranty provided by Daktronics with respect to the Equipment. By accepting delivery of the Equipment, Purchaser agrees to be bound by and accept these terms and conditions. All defined terms within the Warranty shall have the same meaning and definition as provided elsewhere in the Agreement.

DAKTRONICS WILL ONLY BE OBLIGATED TO HONOR THE WARRANTY SET FORTH IN THESE TERMS AND CONDITIONS UPON RECEIPT OF FULL PAYMENT FOR THE EQUIPMENT.

## 1. Warranty Coverage

A. Daktronics warrants to the original end-user that the Equipment will be free from Defects (as defined below) in materials and workmanship for a period of one (1) year (the "Warranty Period"). The warranty period shall commence on the earlier of: (i) four weeks from the date that the equipment leaves Daktronics' facility; or (ii) Substantial Completion as defined herein. The warranty period shall expire on the first anniversary of the commencement date.

"Substantial Completion" means the operational availability of the Equipment to the Purchaser in accordance with the Equipment's specifications, without regard to punch-list items, or other non-substantial items which do not affect the operation of the Equipment.

- B. Daktronics' obligation under this Warranty is limited to, at Daktronics' option, replacing or repairing, any Equipment or part thereof that is found by Daktronics not to conform to the Equipment's specifications. Unless otherwise directed by Daktronics, any defective part or component shall be returned to Daktronics for repair or replacement. Daktronics may, at its option, provide on-site warranty service. Daktronics shall have a reasonable period of time to make such replacements or repairs and all labor associated therewith shall be performed during regular working hours. Regular working hours are Monday through Friday between 8:00 a.m. and 5:00 p.m. at the location where labor is performed, excluding any holidays observed by either Purchaser or Daktronics.
- C. Daktronics shall pay ground transportation charges for the return of any defective component of the Equipment. If returned Equipment is repaired or replaced under the terms of this warranty, Daktronics will prepay ground transportation charges back to Purchaser; otherwise, Purchaser shall pay transportation charges to return the Equipment back to the Purchaser. All returns must be pre-approved by Daktronics before shipment. Daktronics shall not be obligated to pay freight for any unapproved return. Purchaser shall pay any upgraded or expedited transportation charges.
- D. Any replacement parts or Equipment will be new or serviceably used, comparable in function and performance to the original part or Equipment, and warranted for the remainder of the Warranty Period. Purchasing additional parts or Equipment from the Seller does not extend this Warranty Period.
- E. Defects shall be defined as follows. With regard to the Equipment (excepting LEDs), a "Defect" shall refer to a material variance from the design specifications that prohibit the Equipment from operating for its intended use. With respect to LEDs, "Defects" are defined as LED pixels that cease to emit light. The limited warranty provided by Daktronics does not impose any duty or liability upon Daktronics for partial LED pixel degradation. Nor does the limited warranty provide for the replacement or installation of communication methods including but not limited to, wire, fiber optic cable, conduit, trenching, or for the purpose of overcoming local site interference radio equipment substitutions.

THIS LIMITED WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THE EQUIPMENT AND REPLACES ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SPECIFICALLY, EXCEPT AS PROVIDED HEREIN, THE SELLER UNDERTAKES NO RESPONSIBILITY FOR THE QUALITY OF THE EQUIPMENT OR THAT THE EQUIPMENT WILL BE FIT FOR ANY PARTICULAR PURPOSE FOR WHICH PURCHASER MAY BE BUYING THE EQUIPMENT. ANY IMPLIED WARRANTY IS LIMITED IN DURATION TO THE WARRANTY PERIOD. NO ORAL OR WRITTEN INFORMATION, OR ADVICE GIVEN BY THE COMPANY, ITS AGENTS OR EMPLOYEES, SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS LIMITED WARRANTY.

THIS LIMITED WARRANTY IS NOT TRANSFERABLE.

## 2. <u>Exclusion from Warranty Coverage</u>

The limited warranty provided by Daktronics does not impose any duty or liability upon Daktronics for:

A Any damage occurring, at any time, during shipment of Equipment unless otherwise provided for in the Agreement. When returning Equipment to Daktronics for repair or replacement, Purchaser assumes all risk of loss or damage, and agrees to use any shipping containers that might be provided by Daktronics and to ship the Equipment in the manner prescribed by Daktronics;

B. Any damage caused by the unauthorized adjustment, repair or service of the Equipment by anyone other than personnel of Daktronics or its authorized repair agents;



- C. Damage caused by the failure to provide a continuously suitable environment, including, but not limited to: (i) neglect or misuse, (ii) a failure or sudden surge of electrical power, (iii) improper air conditioning or humidity control, or (iv) any other cause other than ordinary use;
- D. Damage caused by fire, flood, earthquake, water, wind, lightning or other natural disaster, strike, inability to obtain materials or utilities, war, terrorism, civil disturbance or any other cause beyond Daktronics' reasonable control;
- E. Failure to adjust, repair or replace any item of Equipment if it would be impractical for Daktronics personnel to do so because of connection of the Equipment by mechanical or electrical means to another device not supplied by Daktronics, or the existence of general environmental conditions at the site that pose a danger to Daktronics personnel;
- F. Any statements made about the product by salesmen, dealers, distributors or agents, unless such statements are in a written document signed by an officer of Daktronics. Such statements as are not included in a signed writing do not constitute warranties, shall not be relied upon by Purchaser and are not part of the contract of sale;
- G. Any damage arising from the use of Daktronics products in any application other than the commercial and industrial applications for which they are intended, unless, upon request, such use is specifically approved in writing by Daktronics; or
- H. Any performance of preventive maintenance.

#### 3. <u>Limitation of Liability</u>

Daktronics shall be under no obligation to furnish continued service under this Warranty if alterations are made to the Equipment without the prior written approval of Daktronics.

It is specifically agreed that the price of the Equipment is based upon the following limitation of liability. In no event shall Daktronics (including its subsidiaries, affiliates, officers, directors, employees, or agents) be liable for any special, consequential, incidental or exemplary damages arising out of or in any way connected with the Equipment or otherwise, including but not limited to damages for lost profits, cost of substitute or replacement equipment, down time, lost data, injury to property or any damages or sums paid by Purchaser to third parties, even if Daktronics has been advised of the possibility of such damages. The foregoing limitation of liability shall apply whether any claim is based upon principles of contract, tort or statutory duty, principles of indemnity or contribution, or otherwise.

In no event shall Daktronics be liable to Purchaser or any other party for loss, damage, or injury of any kind or nature arising out of or in connection with this Warranty in excess of the purchase price of the Equipment actually delivered to and paid for by the Purchaser. The Purchaser's remedy in any dispute under this Warranty shall be ultimately limited to the Purchase Price of the Equipment to the extent the Purchase Price has been paid.

## 4. <u>Assignment of Rights</u>

The Warranty contained herein extends only to the original end-user (which may be the Purchaser) of the Equipment and no attempt to extend the Warranty to any subsequent user-transferee of the Equipment shall be valid or enforceable without the express written consent of Daktronics.

## 5. <u>Dispute Resolution</u>

Any dispute between the parties will be resolved exclusively and finally by arbitration administered by the American Arbitration Association ("AAA") and conducted under its rules, except as otherwise provided below. The arbitration will be conducted before a single arbitrator. The arbitration shall be held in Brookings, South Dakota. Any decision rendered in such arbitration proceedings will be final and binding on each of the parties, and judgment may be entered thereon in any court of competent jurisdiction. This arbitration agreement is made pursuant to a transaction involving interstate commerce, and shall be governed by the Federal Arbitration Act.

#### 6. Governing Law

The rights and obligations of the parties under this warranty shall not be governed by the provisions of the United Nations Convention on Contracts for the International Sales of Goods of 1980. Both parties consent to the application of the laws of the State of South Dakota to govern, interpret, and enforce all of Purchaser and Daktronics rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Warranty, without regard to conflict of law principles.

### 7. Availability of Extended Service Agreement

For Purchaser's protection, in addition to that afforded by the warranties set forth herein, Purchaser may purchase extended warranty services to cover the Equipment. The Extended Service Agreement, available from Daktronics, provides for electronic parts repair and/or on-site labor for an extended period from the date of expiration of this warranty. Alternatively, an Extended Service Agreement may be purchased in conjunction with this warranty for extended additional services. For further information, contact Daktronics Customer Service at 1-800-DAKTRONics (1-800-325-8766).

